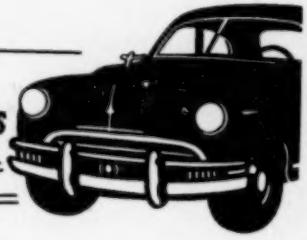
30 CENTS

Consumers' Research Bulletin

August 1951



1951 AUTOMOBILES

Power Lawn Mowers 17

Tennis Balls 25

HEALTH

Penicillin and Other Antibiotics — *Erwin Di Cyan, Ph. D.* 21

Labels of Packaged Foods 25

FOR THE HOME

GE Automatic Washing Machine 20

Midget Fan — Not so Cooling 26

FEATURES

Off the Editor's Chest 2

The Consumers' Observation Post 3

Brief Cumulative Index 24

Ratings of Motion Pictures 27

Phonograph Records — *Walter F. Grueninger* . . . 31

Consumers' Research Bulletin

OFF THE EDITOR'S CHEST

SPECTACULAR SALES and price reductions on nationally advertised brands of merchandise were touched off in New York City by the recent Supreme Court decision in a Louisiana liquor case, which largely invalidated resale price maintenance throughout the United States. The so-called "fair trade" laws in 45 states have permitted manufacturers to set the minimum price at which their products may be sold if they obtain the signature of even one retailer to a fixed-price agreement. In many cases such agreements then became binding on all retailers selling that particular brand even if they had not signed the "fair trade" agreement. In the recent history-making case involving a suit brought by Calvert Distillers, Inc., and Seagram Distillers, Inc., against a New Orleans grocer who sold their products at prices substantially below the minimum set for the state, the Supreme Court held that to impose price fixing on persons who have not contracted or agreed to the scheme is price fixing by compulsion and a violation of the Sherman Anti-Trust Act, regardless of state laws permitting such a system of price maintenance.

The New York department store, R. H. Macy, long a foe of resale price maintenance, immediately cut prices on a wide range of trademarked merchandise. Other New York department stores followed suit, and for a time some store sections looked like the arrival of ticket holders at the Army and Navy football game. Palm Beach suits price fixed at $29.95 went for $17.95 and less; *Mixmasters* priced at $46.50 sold for $26.50; *Bayer* aspirin priced at 59 cents went for 31 cents and even as low as 4 cents per 100. There was some indication that the price war might spread to other sections of the country as dealers sought to unload large inventories stored up in anticipation last year that there would be war shortages and a high demand for nearly every type of consumers' goods.

Most dealers, however, were unable to compete with the spectacular price reductions in New York and paid only lip service to the general feeling on the part of consumers that prices are too high by announcing cut-price sales in large type but making only small or nominal reductions. In their defense, it should be noted that many costs, including wages, transportation, and taxes, remain high and are tending to go up, rather than down. It is therefore not possible for the smaller merchants to make the spectacular price reductions

(*Continued on page 23*)

AUGUST 1951 VOL. 28 • NO. 2

Consumers' Research functions to provide unbiased information on goods bought by ultimate consumers. For their benefit (not for business or industry) and solely with the funds they provide, CR carries on tests and research on a wide variety of goods, materials, and appliances, and publishes the findings in CR Bulletin. Consumers' Research is a non-profit institution, and is organized and operates as a scientific, technical, and educational organization.

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It will be advantageous if you will, whenever possible, send prompt notice of change of address at least 5 weeks before it is to take effect, accompanying your notice with statement of your old address with name in full. At least a month's notice must be given in any case. This rule, however, regarding long advance notice does not apply to military personnel.

¶*CR will, of course, gladly change addresses for men and women in the services as often as required by changes in station and other circumstances.*

★★★For a brief cumulative index of 1951 BULLETINS preceding this issue, see page 24.

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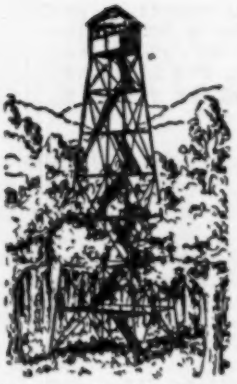


The Consumers' Observation Post

REPLACING THE FAMILY'S ESSENTIAL HEATING EQUIPMENT before cold weather sets in involves an expenditure of major proportions these days. It is advisable to have expert advice, however, before making a final decision to buy a new furnace. Objectionable tactics are sometimes resorted to by salesmen, including false predictions of danger of an explosion of coal gas, and carbon monoxide poisoning from old furnaces, when all that may be needed is some minor repair and not a replacement. In a hearing before the Michigan Corporation and Securities Commission last June, according to a Detroit newspaper, a number of consumers testified in detail on high pressure tactics to which they had been subjected by representatives of the Holland Furnace Co. to induce them to buy new furnaces.

* * *

ONIONS should be used sparingly, to give flavor to a dish, rather than as a frequently-served vegetable. Studies at the University of Illinois Medical School conducted by Drs. M. Kalser, H. K. Ivy, D. F. Magee, and A. C. Ivy indicated that onions caused anemia when consumed in large quantities. The researchers considered it safe to eat a piece of raw onion daily with hamburger, but frowned on commercial and restaurant use of onion oil extract for flavoring, since it was found to contain the active anemia-causing factor. The group is studying the question of whether onions should be banned from the diets of high altitude flyers and persons doing strenuous physical work, two fields in which red blood cells and hemoglobin counts are affected.

* * *

CHLOROPHYLL PREPARATIONS taken internally for control of body odors are considered by Dr. John A. Killian, of Killian Laboratories, New York City, to be ineffective on perspiration odors. Speaking before a meeting of the Society of Cosmetic Chemists, Dr. Killian demonstrated with a series of charts the results of researches indicating that the essential ingredients of such preparations are not soluble at the pH of the intestinal tract and therefore are presumably not absorbed. He also pointed out that the clinical data supporting many of the claims for such preparations do not withstand critical examination.

* * *

GIRDLES AND CORSETS may be useful in making women look and feel better, but they are not indispensable to health, in the opinion of Dr. Theodore R. VanDellen, medical columnist. In special cases, he points out, a properly fitted corset helps to relieve pain in the back by providing support, and also, by shifting the center of gravity backward, it relieves muscular strain. There are certain disorders that require more support than the customary girdle offers, but essentially he concludes that the chief function of a girdle is to provide supporters for hose. Foundation garments will not strengthen muscles that are already strong enough to hold the spine in a normal position.

* * *

RESTRICTION OF FOOD INTAKE and sometimes of salt and fluid intake is the only effective method of dealing with the problem of obesity in a normal person, advises the English physician A. H. Douthwaite. Dr. Douthwaite points out that, as a rule, it is safe to assume that if fat is increasing the body is receiving more food than it needs. He lists a number of factors that in people over 40 lead to a disturbance of equilibrium between intake and output. Women, for example, frequently join the children in their between-meal snacks, which are usually high in carbohydrates. As the family income improves, more money is available to spend on larger meals, and more calories are consumed in the

form of alcoholic drinks. There is an increasing distaste for exercise. Business luncheons, large and alcoholic, are also held responsible by Dr. Douthwaite for the increase of obesity. Restriction of the amount of food eaten, elimination of root vegetables, desserts, sweets, fried foods, and limiting alcohol to one cocktail or two glasses of wine daily are among the doctor's recommendations.

* * *

WOOL HAS BEEN SO HIGH IN PRICE that there has been considerable switching to rayon and other synthetics, particularly for garments in the middle and low price ranges. For all-rayon or part-rayon garments, particularly in the important field of men's suits, consumers will be well advised to check with their local stores on whether or not such clothing meets the specifications of the published American Standards for Rayon Fabrics. Those who purchase garments from the mail-order houses like Sears, Roebuck & Co. and Montgomery Ward & Co. should look for the statement in the catalog description indicating that any rayon garment they contemplate buying conforms with published American Standards. It is perhaps too early to expect to see such information in the 1951 fall catalogues, but write the various mail-order companies with which you are accustomed to deal to find out what their plans are for buying rayon garments made on these specifications for next spring and summer.

* * *

IN VIEW OF THE CURRENT GOVERNMENT ORDER reducing the amount of tetraethyl lead that may be used by gasoline companies for civilian gasoline, it is of interest to note an incidental finding that was made in connection with a series of tests run by the Ford Research organization on their standard production engines. According to the study presented by V. G. Raviolo of the Ford Motor Co., before the Society of Automotive Engineers, two vehicles were operated on identical schedules, one on unleaded and one on leaded gasoline. At the end of 10,000 miles there was a difference in economy of fuel which, although small, was in favor of the unleaded gasoline. The test was repeated with identical results.

* * *

THE CURRENT FASHION OF ADDING FLUORINE to city water systems in order to improve children's teeth is something that requires further study before it can be conclusively termed a sound and desirable measure. Warning of the need to consider the effect of fluorine, even in so small a quantity as one part per million, on people with diseased kidneys and other disorders, particularly in the middle aged and elderly group, comes from Dr. V. O. Hurme, director of clinical research, Forsyth Dental Infirmary for Children, Boston. Dr. Hurme points out that the elderly group, which is impressively large, is known to provide the medical profession with most of its problems in the treatment of degenerative diseases, including the illnesses caused by failure of the kidneys to eliminate various toxic agents. Instead of sponsoring the fluoride treatment of public water supplies to improve children's teeth, public health authorities will do better to give attention to a more effective attack upon the problem of tooth decay, for instance, by taking steps to discourage the sale of candy, sweet crackers, and soda pop in and around school buildings.

* * *

X-RAY THERAPY is often prescribed for treatment of plantar warts, but certain precautions should be taken to protect patients from undesirable after-effects, advises Dr. Clinton W. Lane of St. Louis. The safe dosage he puts at 1500 r, although that does not remove all plantar tissues in all cases. He recommends that each patient be advised at the time of treatment that if that particular dosage of roentgen rays (X-ray) does not effect a cure, the wart is probably not radiosensitive and should not be subjected to future X-ray or radium treatment. Dr. Lane comments further that if this advice is followed there will be fewer patients with painful, crippling reactions of the feet.

* * *

CELLOPHANE is not available in sufficient quantity to supply all firms desiring to use it for packaging their products, reports the duPont Company. The production shortage, according to the company, was enhanced by the federal government's suit charging that duPont's position was that of a monopoly and requesting that the firm be divested of one or more of its existing plants for manufacture of cellophane.

(The continuation of this section is on page 29)

Automobiles of 1951

THE widely predicted shortage of new cars has not materialized, for most makes can now be obtained with only minor delays, and many models are available for immediate delivery. Some of the factories producing cars that are not in particularly good demand are closing down for lack of orders. The fear that only a limited number of new cars would be available has caused many people to turn in their present cars for new ones, for the used car market is now flooded with late model cars; dealers are finding it increasingly difficult to sell their accumulations of used cars of recent production.

The present year has not been distinguished for changes and "improvements," with the exception of the introduction of power-assisted steering, two new V8 engines (on the *Studebaker Commander* and the *Chrysler New Yorker* and *Imperial*) and the new *Hudson Hornet* engine. It should be noted that although the last two of the new engines just mentioned have high compression ratios (7.5 to 1, and 7.2 to 1, respectively), they are claimed not to require the use of premium or "high octane" gasoline. CR considers it definitely undesirable to buy a car that requires gasoline of high octane value for proper operation.

A question frequently asked of Consumers' Research is "When is the most economical time to turn in a car?". Unfortunately, with the present conditions of war production and declining value of the dollar, it is impossible to give a dependable answer to this kind of question. The subject, however, is worthy of investigation, and if any accounting or other expert on the topic among CR's readers cares to offer his suggestions by letter on this important question, the information will be given careful study.

It has not been possible to issue this summary report on automobiles at an earlier date because, during the early months of the year, it was difficult to obtain prompt delivery of some cars for test. A *Pontiac 6*, for example, ordered many months ago was not made available to us until June 6, much too late for inclusion in this report, and the order had to be cancelled. More than two months are required for the testing and compilation of the report on each car, and only four or five cars can be handled at a time. Merely superficial tests or judgments based on judgment of comparative specifications would be of little value to our readers. Most of the cars tested by CR have been driven for a total of approximately 2000 miles by four or five different drivers, who have taken careful notes of their reactions to the way the cars handled and other factors important to users. In addition, measurements and test data are taken and analyzed before final reports and recommendations are prepared. The ratings are based on a careful study of the findings of Consumers' Research tests on cars, and in addition reflect the knowledge and opinions of several well-qualified engineers (supplemented to some extent by subscribers' experience with performance of cars on the road).

Interim reports have been presented on the following cars in previous BULLETINS: January 1951 — *Packard DeLuxe, Henry J 6*; May 1951 — *Ford 6 DeLuxe, Ford Custom 8, Ford V-8 Custom* with *Fordomatic, Pontiac Chieftain DeLuxe 8*, and *Studebaker Commander State*; June 1951 — *Chevrolet Styleline Special, Chrysler Windsor Deluxe, Chrysler New Yorker, Hudson Hornet, Mercury* with overdrive, *Mercury* with *Merc-O-Matic*, and *Nash Ambassador*; July 1951 — *Cadillac 62, De Soto Custom, Hudson Pacemaker, Oldsmobile Super 88*, and *Plymouth P-23 Cranbrook*.

Design Trends

One of the most significant changes in automobile design over the past several years has been the gradual shifting forward of the center of gravity. According to a paper recently presented before the Society of Automotive Engineers by J. J. Robson of the Firestone Tire & Rubber Company, the following table shows the relationship between the average load on the front and rear axles of a representative group of cars since 1935:

1935.....	208 lb.	greater load on rear axle
1940.....	132 lb.	greater load on front axle
1948.....	171 lb.	greater load on front axle
1950.....	350 lb.	greater load on front axle

Since the behavior of the car on the road depends to a considerable extent upon distribution of load between front and rear tires, it is evident that the modern car is handicapped in obtaining traction on slippery streets and roads and that spinning and slewing of rear wheels under bad road conditions have been a serious disadvantage to today's drivers compared with the period in which heavier loads were carried on the rear axles. The situation is made worse by the tendency toward increase of engine horsepower, and automotive engineers are urged to give close heed to these factors in new designs. The tendency to displace the center of gravity of cars toward the front has contributed, with other factors, toward a distinctly backward movement in respect to safety of cars on the road.

The "streamlined" back, with its almost hori-

zontal rear window and poor visibility toward the rear, long criticized by CR, seems to be on its way out. General Motors has gradually dropped this body style from all of its cars except *Chevrolet*, which still offers the undesirable body type in its *Fleetline* model. Few "standard" models are coming through from the factories. The manufacturers apparently have educated the public to the "deluxe" models by emphasizing so far as possible the differences unfavorable to the "standard" bodies and by making it difficult to obtain lower-priced cars. Pricing of accessories is something of an enigma. In general, accessories for the *Buick* are cheaper than for the *Chevrolet*. For example, directional signals for the *Buick* cost $10.60, for the *Chevrolet* $22.50. One of the reasons given is that on the *Buick* the accessories are installed at the factory, while on the *Chevrolet* they are usually installed by the dealer. Turn signals are a worth-while addition to any car from a safety standpoint and are strongly recommended by Consumers' Research. It is believed that they may in time be required by law on all cars. New York, New Hampshire, and North Dakota have laws requiring electric flashing turn signals on all new cars licensed after January 1, 1952.

Some changes have been made in starting arrangements. The most familiar method, still used by *Chevrolet*, is first to turn on the ignition switch by the key and then to press a separate starter button. In the new *Buick* models, engine starting is accomplished by pressing down on the accelerator pedal after the ignition is turned on, while on the *Nash* equipped with *Hydra-Matic*, raising the drive selector lever in the "Park" position starts the car; both of these methods are convenient and desirable. The Ford and Chrysler lines have combination ignition-starter locks in which turning the key clockwise turns on the ignition switch; turning the key further (against a spring load, so that the key springs back when released) operates the starter. This arrangement makes it difficult for a thief to start the car by manipulating connections in the wiring. As with most other starting methods, there is the disadvantage that on cars having a clutch pedal, if the driver should accidentally turn the key too far before depressing the clutch pedal, with the car in gear, the starter will cause an unintended and dangerous motion of the car.

Power-assisted steering reduces the effort required to turn the front wheels, so long as the engine, which indirectly provides the necessary power for this operation, continues to run. The use of power-assisted steering permits a reduction in the over-all steering ratio (that is, the number of turns of the steering wheel required to turn the front wheels from full right to full left), giving a "fast steering response" which is eminently desirable (down to a certain practical limit). Heretofore, reduction of the steering ratio on passenger cars to a desirably low value was not practicable because of the hard steering at low speeds and great physical effort by the driver required in parking a car with a low steering ratio.

Substitutions Necessitated by Wartime Shortages

The general impression among automotive engineers is that substitutions of material that will significantly affect the quality of a car may not be necessary. Their chief concerns seem to be about the availability of steel. On the other hand, some substitutions have already been made which in CR's opinion are not a good omen for the future. Many complaints have already been received on the lack of durability of the chrome plating, and on some of CR's test cars the plating showed evidence of rusting within a few weeks after delivery. New methods of plating have been devised to reduce the amount of chrome used, by first plating the parts with a thin layer of copper. Copper, used in considerable amounts in automobile radiators, is a critical material, and *Pontiac* and *Chevrolet* are using steel upper tanks in place of the brass formerly used. It is expected that these will have a relatively short life unless proper chemical "inhibiting agents" are added to the water to prevent rusting. The manufacturers of the *Pontiac* are recommending the addition of 4 ounces of borax to the radiator solution as a rust inhibitor.

Automatic Transmissions

Although several million cars are now equipped with automatic transmissions, it is most unlikely that these units have reached their final development, and they are likely to be subjected to extensive changes in design and details as time goes on and experience furnishes guides to improvement. *Hydra-Matic*, it is understood, will have a third gear range added in addition to the present drive, low, and reverse ranges. This new range is intended to permit more efficient and smoother driving in traffic and on steep grades, to give better gasoline mileage and better acceleration; top speed in this new range will be slightly lower than is provided by the normal drive range.

As compared with a conventional transmission and clutch, automatic and semiautomatic transmissions offer increased smoothness in starting; faster acceleration in the hands of the non-expert driver; reduction of gearshifting to a minimum; reduced shock loading of transmission, propeller shaft, rear axle and allied driving-train parts; and an overall softness in driving which gives the gasoline car somewhat the smooth action of a car powered by a steam engine.

There are certain disadvantages in the automatic transmission which the average user may not discover until he has had the car for some time. One obvious defect is in the increase in fuel consumption over a car with a conventional transmission; whether the increase is small or considerable depends on the make and type of transmission. There is necessarily greater mechanical complication, which reduces the inherent reliability of the drive system, and, above all, involves the risk of extensive and expensive repairs of a kind which may perhaps be available only through the service department of a dealer in a good-sized city; since the details of construction and adjustment of the complex drive units are known only to a limited number of automobile mechanics, few automobile mechanics would be able to service more than one make and type readily, and with certainty of following right procedures.

Another disadvantage is the higher engine speed when the car is being accelerated at starting; with some kinds of fluid transmission, this is very noticeable. There is, besides, reduced effect of the engine as a brake when descending steep grades in the high-gear position; greater difficulty in manipulating the car in tight spots or in "rocking" the car back and forth; special difficulties and precautions in case it is necessary, because of a run-down battery, or for other reasons, to start the car by pushing or towing; a bigger engine is required to overcome power losses (*Buick* and *Chevrolet*).

Hydra-Matic

The oldest of the automatic transmissions is the *Hydra-Matic* which consists of a four-speed planetary transmission plus reverse. No clutch pedal is provided, and the change from fourth to third gear to obtain quick acceleration is accomplished by pushing the accelerator pedal all the way down (called "kickdown"). Pontiac recommends that, for parking, the lever be placed in the *R* (reverse) position (see CONSUMERS' RESEARCH BULLETIN, January 1949). In sand, mud, or snow, and in descending steep hills (the latter to provide added engine braking), lever should be placed in *L* (low). When transmission is properly adjusted, shifts are relatively smooth, but are noticeable to the driver. The transmission causes the car to creep slightly on a hard level surface; this tendency diminishes as mechanism warms up. Loss in gasoline mileage from a *Hydra-Matic* transmission is estimated, with a large car, to be between 2 and 3 miles per gallon.

Dynaflow

The *Dynaflow* transmission as used in *Buick* is a single-stage five-element torque converter coupled to a two-speed planetary transmission plus reverse. No clutch pedal is provided and no "kickdown," the latter not being needed with this kind of transmission. In parking, lever is placed in *P* position which engages a pawl in a ratchet ring located at back of transmission. The transmission may be damaged if the lever is put in *P* position when the car is in motion, or if the car is towed at speeds above 30 m.p.h.

The lever is placed in the *L* range when very fast acceleration from a stop is desired, but all ordinary driving is in the *D* range. Shift from *L* to *D* should be made without releasing accelerator pedal. Car may be "rocked" by shifting back and forth from *L* to *R*.

Creep is very noticeable, especially when the oil is cold. Acceleration in the *D* range is very smooth since there is no shifting of gears, but the engine speed is necessarily higher during the acceleration period than in a car with conventional clutch and transmission. There is also a momentary hesitation before the car starts to move, and during the acceleration period the engine gives the impression of running very fast. The power (heat) loss of this transmission is such that an oil cooler, which is a part of the radiator, is necessary; loss in gasoline mileage is greater with the *Dynaflow* than with the *Hydra-Matic*. It is estimated that *Dynaflow*-equipped cars will give about 3 to 4 m.p.g. less than the same cars with standard transmission.

The *Chevrolet Powerglide* is essentially the same as *Dynaflow* except that in the interest of manufacturing economy the converter is made almost entirely of steel stampings instead of castings, and the *Powerglide* is equipped with an additional set of vanes which provide additional engine braking on downgrades and make it possible to start the car by pushing at low speeds of 12 to 15 m.p.h.

Ultramatic

The *Packard Ultramatic* is a two-stage converter coupled to a two-speed (plus reverse) planetary transmission with a direct drive clutch. There is no clutch pedal. The oil in the drive system is water cooled. Under ordinary driving conditions the direct clutch engages at around 15 m.p.h., but if pressure is maintained on the accelerator pedal, it will not cut in until car speed is around 50 m.p.h. A "kickdown" switch disengages the direct drive clutch at the will of the driver at speeds below 50 m.p.h. During deceleration, the direct drive clutch automatically disengages at around 13 m.p.h. Action of the *Ultramatic* is very smooth and somewhat similar to that of the *Dynaflow* except that the *Ultramatic* has the addition of direct drive in both "high" and "low" ranges. Efficiency is somewhat higher than that of *Dynaflow*; loss in gasoline mileage is estimated to amount to about 2½ to 3 m.p.g. as compared with a similar car having conventional transmission.

Studebaker

The *Studebaker* automatic transmission is a three-element single-stage torque converter coupled to a three-speed (plus reverse) planetary transmission. Like *Ultramatic*, it has a direct drive clutch, but in the *Studebaker* this functions only in the drive range. There is no clutch pedal. "Kickdown" switch changes from high gear to intermediate at any speed below 50 m.p.h.

In the *D* range, the direct connection of engine with transmission occurs when the transmission shifts from intermediate to high. The converter loss is thus eliminated in all driving in high gear.

In the *L* range, the transmission does not provide any automatic shifting either up or down. The first or low gear of the transmission is always engaged. The *L* range is primarily for extremely fast acceleration at low speeds, for hill climbing under difficult conditions, and for improved engine braking effect. The lever may be shifted to *D* at any car speed and any throttle opening. It is not recommended by the car manufacturer that the shift from *D* to *L* be made above 40 m.p.h. with the throttle closed, or above 20 m.p.h. with the throttle open.

The lever may be shifted as rapidly as desired between *L* and *R* for rocking the car. *R* cannot be engaged above a forward speed higher than 10 m.p.h. If the shift is made accidentally, the transmission goes into *N*, until the speed of the car is reduced, or the lever moved to *L* or *D*. (Note: This is a new feature in automatic transmissions and should eliminate many of the possible causes of serious damage to the transmission. The protection against engaging *P* when the car is moving that is afforded by the *Studebaker* drive, is another valuable safeguard. This transmission affords another good feature in that the car can be "push-started" in either *L* or *D* above 10 m.p.h.)

Creep is prevented by a special control which, when the transmission is adjusted properly, acts to hold the car motionless when the throttle is closed.

Air cooling is used for the transmission oil, and loss in gasoline mileage due to the transmission is estimated to be between 1 and 2 m.p.g.

Ford-Mercury

The *Ford-Mercury* automatic transmission is a single-stage three-element torque converter coupled to a three-speed planetary transmission, plus reverse. In a sense, this transmission is a combination of the *Hydra-Matic* and *Dynaflow*, in which the advantages of each have been used. When the lever is in the *D* range, the car starts in second or intermediate gear (1.48 to 1 ratio) and shifts to high (1 to 1 ratio) between 17 and 63 m.p.h., depending on the amount of throttle opening. At speeds below 57 m.p.h., the intermediate ratio, for quick acceleration, may be obtained by pressing the accelerator pedal to the floor momentarily. At speeds below 20 m.p.h. and with less than full throttle, or with throttle closed at between 5 to 8 m.p.h., the transmission will shift down to intermediate. When the lever is moved from *D* position to the *L* position, the transmission will be in first or low gear (2.44 to 1 ratio) at speeds below 40 m.p.h.; at speeds above 40 m.p.h., it will shift to second or intermediate gear, and will remain in this gear regardless of throttle opening. The lever may be moved from *D* to *L* at any time, e.g., to provide good engine braking. Transmission oil is air-cooled only. This transmission is slightly more efficient than the *Dynaflow* or *Powerglide*, and it is believed that the loss in gasoline mileage as compared to a car with the conventional transmission should amount to less than 2 m.p.g.

Chrysler

The *Chrysler* semiautomatic transmission as used on *Chrysler*, *De Soto*, and *Dodge*, consists of a fluid coupling with four-speed constant-mesh transmission with a conventional clutch, between the transmission and the fluid coupling, operated by a clutch pedal. An overrunning clutch makes it possible to obtain four forward speeds with the same number of gears as are used for a three-speed transmission. A conventional shift lever with the low gear position blocked off is used. The low range is obtained by placing the lever in conventional second gear position, high range with the lever in high gear position, and reverse with lever in conventional reverse position. To change position of the lever, the clutch must be depressed. Normal starting and driving is done with the lever in high, without operating the clutch pedal. With the lever in "high" position, the car starts in third gear; to change to fourth gear, the driver must lift his foot from the accelerator pedal. During this wait, of about 2 seconds the transmission shifts into fourth gear. This time delay could create a hazard under certain traffic conditions. To change back to third gear at speeds below approximately 40 to 45 m.p.h., the driver presses the accelerator to the floor momentarily ("kickdown"). Because of the high engine speed in third gear, this gear must not (according to the *Dodge* instruction book) be used at speeds above 35 m.p.h.; at speeds above approximately 40 m.p.h., pressing the accelerator to the floor does not change gears from fourth to third, and consequently the kickdown feature is of no value in obtaining quick acceleration, as for example in attempting to pass a fast-moving car or truck, as can be done with *Hydra-Matic* and similar transmissions.

On the *Chrysler Crown Imperial* sedan and limousine a torque converter is standard equip-

ment; it is available as extra equipment on the *New Yorker*. This converter, which is of the four-element type, is used in addition to the semi-automatic transmission and permits a greater percentage of driving to be done in the high range.

Hudson

The *Hudson Super-Matic* drive consists of the usual *Hudson* wet-type clutch and sliding gear transmission supplemented by a vacuum cylinder and the necessary control mechanism for operating the clutch automatically and shifting up or down (as required) between second and third gears. The automatic features may be rendered inoperative by pressing a selector button on the dash. The car then operates in the conventional manner.

In automatic operation, the clutch pedal must be depressed before the engine can be started. With the engine running, the shift lever is normally moved to the high gear position without depressing the clutch pedal. Then, when the accelerator is depressed, the clutch engages automatically and the car moves forward in second gear. When the desired speed is attained, lifting the foot from the accelerator momentarily causes the transmission to shift into high gear (provided a speed of about 10 m.p.h. or more was attained in second). Starting in low gear can be effected, if desired, by moving the shift lever to that position at the start. The transmission will then remain in that gear until the lever is moved manually to some other position.

This transmission eliminates the manual effort involved in operating the clutch and shift lever, but it in no way affects the performance of the car when it is once in motion. Because the clutch and throttle cannot be operated independently, the mechanism lessens to some degree the driver's control when maneuvering (as in parking) and may cause excessive clutch slippage or a rather abrupt start, depending on the rapidity and amount of throttle opening. These disadvantages can, of course, be eliminated by switching off the automatic drive, but when that is done, a heavy pressure is required to operate the clutch, much heavier than in *Hudson* cars not equipped with the *Super-Matic* drive. An overdrive unit offering the usual advantages (and disadvantages) of such a unit is available at extra cost.

In CR's opinion, the *Super-Matic* drive is the least desirable of the current automatic drives, and we believe that for most people the added complication and cost would not be worth while (about $60 extra without overdrive, $160 with overdrive).

While driving a car equipped with an automatic transmission is considered relatively simple, this simplicity is often deceptive. Actually to obtain the best results, the driver needs to master an entirely new technique. On most of these drives (except *Dynaflow* and *Powerglide*), the driver has some control of the points at which the shifts are made and, obviously for best economy, the driver should operate the car so that a minimum amount of running is done in the lower gears. The oil level must be checked and changed according to the manufacturer's instructions. On the *Dynaflow*, for example, the oil level should be checked every 1000 miles with the transmission oil warm. Oil should be added with the lever in Park position, and the engine idling while the fluid is being poured in. The transmission oil should be changed every 25,000 miles.

In California, persons who have learned to drive on a car with an automatic transmission are issued a special license which does not permit them to drive a car with a standard transmission.

Automobile Excise Taxes

The Utah legislature, in a joint resolution directed to Congress, criticized federal automotive excise taxes as "discriminatory and unfair," and expressed itself as "unalterably opposed to any proposals to increase further the federal automotive excises. Passenger cars are no longer a luxury to be taxed as such, but instead are used daily by workers, professional and business men, farmers and livestock men in the pursuits of their livelihood." (The intention was to increase the automotive excise tax from 7% to 20%, which would put a federal government tax of about $300 on a car in the *Chevrolet* class.)

A recent article on hidden or "sneak" taxes, as they have been termed, stated that the total taxes paid, necessarily by the consumer, on a $2100 car amounted to between $400 and $500. The owner of an automobile pays taxes on many things which he uses, including gasoline, tires, and accessories, and taxes thus add substantially to the cost of owning and operating an automobile. New York State alone collects over 90 million dollars in gasoline taxes, and another 75 million in registration and license fees, etc. The average annual cost to an automobile owner in Virginia for taxes is close to $100. In England, where the process of socialization has gone much farther, and "welfare services" form a large proportion of the total national budget, the purchase tax on a new car adds the startling figure of 55 percent, approximately, to the price of the car.

According to recent figures released by the American Automobile Association, the cost per year of operating the average automobile, based on 10,000 miles per year, amounts to almost $900, and a car driven 20,000 miles a year would cost its owner about $1300, or about $3.50 a day. These

figures, although they include gasoline and the state and federal taxes thereon, oil, maintenance, tires, insurance, license fees, and depreciation, do not include garage rent; thus the city dweller — especially the man living in a large city — may have to add a substantial sum in addition. In the business sections of some large cities, the parking costs for a business or professional man using a car in his work may add another $1.50-$2 a day.

Additional Automobile Listings

A (with Dynaflow — A–)

Buick Special 41D. $2119 delivered N.Y.C. Extras: heater and defroster, $58; radio, $80; *Dynaflow*, $169. Engine: 8 cylinders, valve-in-head, 3-3/16 in. bore x 4⅛ in. stroke; 263 cu. in. displacement; rated brake hp., 120 at 3600 rpm. (128 with *Dynaflow*); taxable hp., 32.51; compression ratio, 6.6 to 1 (7.2 to 1 with *Dynaflow*). Engine oil capacity, 5½ qt.; cooling water, 13½ qt., with heater (15 qt. with *Dynaflow*); gasoline tank, 19 gal. Equipped with automatic choke. Gear ratio, 3.9 to 1 (3.6 to 1 with *Dynaflow*). Steering factor, 4.6 (satisfactory), but car somewhat hard to steer, on account of the large tires. Battery, 100-amp.-hr. Wheelbase, 121.5 in.; over-all length, 205 in.; width, 77 in.; height, 63½ in. Tread width: front, 59-3/32 in.; rear, 59 in. Tire size, 7.60 x 15 (adequate). Brake area, 154 sq. in.; brake factor, 35 (somewhat low). Hand brake not protected against freezing. X-type frame. Coil springs at rear. Minimum road clearance, 7.7 in. Usable seat widths: front, 57.7 in.; rear, 57 in. Headroom:[1] front, 35.2 in.; rear, 35.2 in. Leg room: front, 42.8 in.; rear, 41 in. Test car was equipped with *Dynaflow* transmission. Acceleration from 20 to 50 m.p.h. on level road, 11.5 seconds (3.8 ft./sec./sec.); from 40 to 60 m.p.h., 10.9 seconds (2.7 ft./sec./sec.), about average. Average gasoline mileage: city, 13 m.p.g.; country, 15 m.p.g. Vision over hood, good, but bad glare and moving reflections in windshield under certain light conditions. Rear vision, poor, due to size of mirror, which was too short and too narrow, and sharply curved end portions of rear window. Rear fenders, welded; front fenders, bolted. Accessibility of spare tire, good. Trunk space, adequate. Wheels and tires readily accessible for servicing. Riding comfort, good. Ratio of car weight, front to rear, 53% to 47% (about normal for today's cars). Total weight, 3968 lb. Shipping weight, 3680 lb. Depreciation, high. As accidental overfilling of tank permits gasoline to drip down on hot exhaust pipe, tank should not be filled immediately after engine has been pulling hard, e.g., up a long hill, when temperature of exhaust pipe is likely to be very high. Speedometer errors unduly large: at speedometer reading of 20 m.p.h., actual speed 16.9 m.p.h.; at 40 m.p.h., 34.4 m.p.h.; at 60 m.p.h., 53.5 m.p.h.

[1] Without passengers. A person of average weight compresses front seat 3½ in., rear seat 3½ in., increasing headroom by like amounts.

A–

Chevrolet DeLuxe Powerglide. $1822 delivered N.Y.C., without spare tire. Engine: 6 cylinders, overhead valve, 3-9/16 in. bore x 3-15/16 in. stroke; 235.5 cu. in. displacement; rated brake hp., 105 at 3600 rpm.; taxable hp., 30.4; compression ratio, 6.7 to 1. Engine oil capacity, 5½ qt.; cooling water, 15 qt.; gasoline tank, 16 gal. Equipped with manual choke. Gear ratio, 3.55 to 1. Steering factor, 4.0 (satisfactory). Battery, 100-amp.-hr. For chassis and body details, see report on *Chevrolet Styleline Special* in June 1951 issue. Acceleration from 20 to 50 m.p.h. on level road, 13.0 seconds (3.4 ft./sec./sec.), slower than average; from 40 to 60 m.p.h., 12.0 seconds (2.4 ft./sec./sec.), below average. Gasoline mileage under test conditions: at 30 m.p.h., 22.9 m.p.g.; at 50 m.p.h., 16.8 m.p.g. Average gasoline mileage: city, 13-14 m.p.g.; country, 16-17 m.p.g. The latter is about 2 m.p.g. less than obtained with the *Styleline Special* without *Powerglide*. Ratio of car weight, front to rear, 55% to 45% (about normal for today's cars). Total weight, 3460 lb. Shipping weight, 3300 lb. Speedometer errors: at indicated speed of 20 m.p.h., actual speed 19.4 m.p.h.; at 35 m.p.h., actual 33 m.p.h.; at 50 m.p.h., actual 47.4 m.p.h. On a second *Chevrolet* tested, speedometer errors were somewhat larger: at indicated speed of 20 m.p.h., actual speed 18.3 m.p.h.; at 35 m.p.h., actual 31 m.p.h.; at 50 m.p.h., actual 43.4 m.p.h. Depreciation, low.

A– (with Gyro-Matic — B+)

Dodge Meadowbrook. $2016 delivered N.Y.C. *Gyro-Matic* drive, $90 extra. Engine: 6 cylinders, L head, 3¼ in.

Buick Special 41D

Dodge Meadowbrook

bore x 4⅛ in. stroke; 230.2 cu. in. displacement; rated brake hp., 103 at 3600 rpm.; taxable hp., 25.35; compression ratio, 7.0 to 1. Engine oil capacity, 5 qt.; cooling water, 14 qt. (pressure-type system); gasoline tank, 17 gal. Equipped with automatic choke. Gear ratio, 3.9 to 1. Steering factor, 4.1. Battery, 105-amp.-hr. Wheelbase, 123½ in.; over-all length, 207 in.; width, 74 in.; height, 65 in. Tread width: front, 56-5/16; rear, 59. Tire size, 7.10 x 15 (slightly overloaded). Brake area, 173.5 sq. in.; brake factor, 42. Box-type frame. Minimum road clearance, 7½ in. Usable seat widths: front, 56.5 in.; rear, 54.8 in. Headroom:[3] front, 35 in.; rear, 36 in. Leg room: front, 43 in.; rear, 39¼ in. Acceleration from 20 to 50 m.p.h. on level road, 15.9 seconds (2.8 ft./sec./sec.); from 40 to 60 m.p.h., 12.6 seconds (2.3 ft./sec./sec.). Reported average gasoline mileage:[3] city, 14 m.p.g.; country, 18-19 m.p.g. Vision over hood, very good; to rear, very good. One-speed electric wipers. Fenders, bolted (desirable). Accessibility of spare tire, good. Trunk space, adequate. Wheels and tires readily accessible for servicing. Riding comfort, very good (but see *Plymouth*). Semiautomatic transmission, of a type that was not considered fully satisfactory; in the car tested it was necessary to lift foot from accelerator for about 2 seconds in order to change from third to cruising or fourth gear (could mean a hazard due to possible overspeeding of engine in a crucial traffic emergency). (In third gear, engine rpm. at road speeds above 35 to 40 m.p.h. [see text on "Automatic Transmissions"] were much too high. Instruction book states that third gear was not to be used at speeds over 35 m.p.h.) Ratio of car weight, front to rear, 53% to 47% (about average). Total weight, 3656 lb. Shipping weight, 3415 lb. Speedometer errors were small: at indicated speed of 20 m.p.h., actual 20.2; at 40 m.p.h., 39.1; at 50 m.p.h., 48.1. Depreciation, high.

Explanation of Listings

In the table of listings, the *Brake Factor* is a number indicative of the probable relative life of the brake linings; a high brake factor is important from the standpoint of safety of the car and probable cost of brake maintenance. (Cars with automatic transmissions require brakes that have a longer life, with less frequent adjustment, built into them than those with standard gear shifts because the reduced amount of engine braking available puts an extra burden on brakes and wears out brake linings sooner. Overdrive with free wheeling also imposes an extra burden on brakes.) The brake factor figures are obtained by dividing the total area of the brake linings in square inches by the shipping weight of the car plus the weight of five passengers at 150 lb. each or 750 lb. (450 lb. for the *Crosley*, 600 lb. for *Willys* station wagons and *Nash Rambler*) and multiplying by 1000 (to avoid fractional numbers).

[3]Without passengers. A person of average weight compresses front seat 4½ in., rear seat 2¾ in., increasing headroom by like amounts.
[4]With semiautomatic transmission.

Engine Revolutions per Mile and *Piston Speed in Feet per Minute* at 60 m.p.h. are both shown; these are considered to give a rough relative measure of the probable or expected rate of engine wear.

Headroom and *Leg Room* are based on measurements in the car with no passengers. Actual headroom available for passengers will be somewhat greater depending upon the weight of the person and the amount of "give" in the seat cushions.

Estimated Depreciation is based on the difference between the original New York City price of the most nearly comparable 1950 car and the turn-in value of that car as given in the "Official Used Car Guide" for June 1951, published by the National Automobile Dealers Used Car Guide Co., 1026 17 St., N.W., Washington 6, D. C. The estimates of depreciation, *low*, *medium*, *high*, *very high*, should be used only as indications of *relative* depreciation of the various cars under normal conditions. (They are based on numerical averages for 14 states east of the Mississippi River but will be generally applicable.)

The *Steering Factor* as given in the listings is believed to be a more accurate method of expressing the properties of the steering mechanism than the "steering gear ratio" often given. The steering factor is obtained by multiplying the number of turns of the steering wheel to turn the front car wheels from full right to full left by the length of the wheelbase in inches, and dividing the product by 100 times the angle turned by the car wheels in radians. A number that is too high is undesirable from a safety standpoint (slow steering response); a low number (except in the case of the power-assisted-steering *Chrysler*) would indicate hard steering at low speeds and relatively great physical effort by the driver required in parking.

Maximum Brake Horsepower at stated revolutions per minute is the figure claimed by the manufacturers. The actual maximum brake horsepower delivered to the rear axle will be considerably less, as manufacturers' brake horsepower figures are nearly always based on performance of the "bare engine."

Acceleration tests are made by approaching the starting line, in high gear, at each of two constant speeds, one of 20 and one of 40 m.p.h., then immediately pressing the accelerator pedal to the floor. In cars with standard transmissions, no changing of gears is involved. The ranges 20 to 50 m.p.h. and 40 to 60 m.p.h. have been selected to give an indication of the ability of the particular car to pass another slower-moving car or truck on the road. Acceleration times for these ranges should not be confused with figures often reported in popular magazines which give an indication of the ability of a car to attain a certain speed from

(*Continued on page 16*)

BRAND NAME	N.Y.C. Delivered Price[1]	Estimated Depreciation	Wheelbase, Inches	Over-all Length, Inches	Over-all Width, Inches	No. of Cylinders	Manufacturers' Rated Horsepower at Revolutions per Minute	Hp. per cu. in. Displacement	Percentage Weight on Front	Shipping Weight (lb.)	Compression Ratio: Standard	Compression Ratio: Optional	Steering Factor	Brake Area, Sq. Inches	Brake Factor	Tire Size
Crosley Sedan	995	High	80	148	50	4	26.5[6] @ 5400	.60	•	1363	7.8	—	•	56	31	4.50x12
Crosley Roadster	1000	High	85	137	50	4	26.5[6] @ 5400	.60	•	1175	7.8	—	•	56	35	4.50x12
Price Group 1																
Henry J 4	1393	•	100	174	70	4	68 @ 4000	.51	•	2300	7.0	—	•	125	43	5.90x15
Henry J 6	1513	•	100	174	70	6	80 @ 3800	.50	59	2328	7.0	—	•	125	43	5.90x15
Chevrolet Styleline Special	1555	Low	115	198	74	6	92 @ 3400	.42	54	3130	6.6	—	4.0	158	41	6.70x15
Ford 6 DeLuxe	1584	Med.	114	197	73	6	95 @ 3300	.42	56	3040	6.8	—	4.3	174	46	6.00x16
Willys Jeepster	1588	Med.	104	178	70	4	72 @ 4000	.54	•	2460	7.4	7.8	•	133	43	6.40x15
Plymouth P-22 Concord	1634[9]	Med.	111	188	73	6	97 @ 3600	.45	•	2975	7.0	—	•	158	42	6.40x15
Ford V-8 DeLuxe	1660	Med.	114	197	73	V8	100 @ 3600	.42	56.5	3115	6.8	—	4.3	174	45	6.70x15
Studebaker Champion	1676[9]	Med.	115	198	71	6	85 @ 4000	.50	•	2730	7.0	7.5	•	148	43	6.40x15
Plymouth P-23 Cranbrook	1773[9]	Med.	118.5	194	73	6	97 @ 3600	.45	54	3110	7.0	—	4.1	152	39	6.70x15
Chevrolet DeLuxe Powerglide	1822	Low	115	198	74	6	105 @ 3600	.45	55	3300	6.7	—	4.0	158	39	6.70x15
Willys 4 Station Wagon	1841	High	104	176	72	4	72 @ 4000	.54	•	2820	7.4	7.8	•	133	39	6.70x15
Price Group 2																
Pontiac 6 Chieftain	1901	Low	120	202	76	6	96 @ 3400	.40	•	3273	6.5	7.5	•	161	40	7.10x15
Willys 6 Station Wagon	1922	High	104	176	72	6	75 @ 4000	.47	•	2830	6.9	—	•	133	39	6.70x15
Ford V-8 Custom Fordomatic	1923	Med.	114	197	73	V8	100 @ 3600	.42	57.5	3260	6.8	—	•	174	43	6.70x15
Nash Statesman	1930	High	112	201	78	6	85 @ 3800	.46	•	2970	7.0	—	•	132	35	6.40x15
Dodge Wayfarer D-41	1933	High	115	200	73	6	103 @ 3600	.45	•	3215	7.0	—	•	158	40	6.70x15
Nash Rambler Convertible	1938	High	100	176	74	6	82 @ 3800	.48	58.5[8]	2430	7.25	—	•	93	31	5.90x15
Pontiac 8 Chieftain	1969	Low	120	202	76	8	118 @ 3600	.43	56[8]	3373	6.8	7.5	3.9	161	39	7.10x15
Studebaker Commander	2000	High	115	198	71	V8	120 @ 4000	.52	58.5[8]	3100	7.0	7.5	5.2	163	42	7.10x15
Price Group 3																
Dodge Meadowbrook D-42	2016	High	123.5	207	74	6	103 @ 3600	.45	53[8]	3415	7.0	—	4.1	174	42	7.10x15
Buick Special 41D	2119	High	121.5	205	77	8	120 @ 3600 128[2] @ 3600	.46 .49	53[8]	3680	6.6 7.2	—	4.6	162	36	7.60x15
De Soto De Luxe	2139	High	125.5	208	75	6	116 @ 3600	.45	•	3570	7.0	—	4.7	201	46	7.60x15
Mercury	2239	High	118	207	77	V8	112 @ 3600	.44	•	3470	6.8	—	4.6	159	38	7.10x15

[1] Not including city sales tax.
[2] With automatic or semiautomatic transmission.
[3] With overdrive.
[4] With front seat at maximum adjustment.
[5] With seats unoccupied.
[6] With standard engine components, e.g., pumps, generator, fan etc.
[7] In third gear of overdrive.
[8] Under test conditions.
[9] Cost of spare tire not included in price.

Percent Overload on Tires	Usable Seating Widths, Inches		Maximum Leg Room, Inches[4]		Headroom, Inches[5]		Min. Road Clearance, In.	Engine to Rear Wheels Gear Ratio		Engine Revolutions Per Mile		Piston Speed in ft./min.		Acceleration Time in Seconds				M.p.g. at 50 m.p.h. or average in Country Driving	M.p.g. - AAA Economy Run	RATING
	Front	Rear	Front	Rear	Front	Rear		Standard	Optional	Standard	Optional	Standard	Optional	20-50 m.p.h.		40-60 m.p.h.				
None	42	30	39.5	32.5	34.2	33.5	6.5	5.17	—	5070	—	1900	—	•	•	•	•	•	NE	B—
None	42	•	27	•	37	•	6.5	5.17	—	5070	—	1900	—	•	•	•	•	•	NE	B—
None	53.8	51.2	41	38.0	39.5	36.0	7.5	4.1	3.18[3]	3210	2490	2340	1820	•	•	•	•	•	30.1[3]	B—
None	53.8	51.2	41	38.0	39.5	36.0	7.5	4.1	3.18[3]	3210	2490	1870	1450	11.2[3]	A	9.0[3]	A	24[3]	28.9[3]	B—
None	55	54	42	39.5	36.5	35.5	7.8	4.1	—	3030	—	1890	—	13.9	BA	11.3	BA	18	22.0	A
None	57.5	56	43.3	40.5	35.5	33.0	8.2	3.73	4.1	2650	2910	1940	2130	15.7	BA	12.2	BA	17	25.9[3]	A
None	47	44	41.8	34.5	37	34.5	8.5	4.56	3.42[3]	3470	2600	2530	1900	•	•	•	•	•	26.8[3]	B+
12	54.8	49	40.8	37.8	35.5	36.5	7.5	3.73	—	2840	—	2070	—	•	•	•	•	•	24.1	A—
None	57.5	56	43.3	40.5	35.5	33.0	8.2	3.73	4.1	2750	3030	1720	1890	15.6	BA	12.6	BA	17	26.0[3]	A
None	59.2	58.2	39.8	39	36.5	34.5	8.0	4.1	3.19[3]	3120	2430	2080	1620	•	•	•	•	•	28.6[3]	A—
None	54.8	53.0	43	40	35.3	35.5	7.6	3.9	—	2880	—	2100	—	16.0	BA	11.9	BA	19-20	23.0	A
9	55	54	42	39.5	36.5	35.5	7.8	3.55	—	2620	—	1720	—	13.0	A	12.0	BA	16-17	NE	A—
None	47	41.4	41.8	36	38.5	37.5	8.5	5.38	3.77[3]	3970	2780	2890	2030	•	•	•	•	•	NE	B
None	54.8	54.2	42.5	40	35.8	36	8	4.1	3.63[3]	2970	2630	1980	1750	•	•	•	•	•	NE	A—
None	47	41.4	41.8	36	38.5	37.5	8.5	4.88	3.77[3]	3600	2780	2100	1620	•	•	•	•	•	NE	B
8	57.5	56	43.3	40.5	35.5	33	8.2	3.31	3.54	2440	2610	1520	1630	10.5	G	9.5	A	17[3,5]	NE	B+
12	59.5	52.5	41.5	39.5	35.2	34.8	7.3	4.38	3.78[3]	3330	2880	2220	1920	•	•	o	•	•	26.1[3]	B+
7	57	53.5	40.5	37.6	35.5	36.2	8	3.9	—	2880	—	2220	—	•	•	•	•	•	NE	A— (B+ with semiautomatic transmission)
None	52	48.5	42	37	35.5	35.5	7.8	3.78	2.87[3]	2980	2250	1860	1410	•	•	•	•	24-26	31.1[3]	B+
None	54.8	54.2	42.5	40	35.8	36	8	3.9	3.63[3]	2820	2630	1760	1640	9.8[3]	G	8.5[3]	G	16	NE	A
None	54	51.5	38	36.2	37.2	36.5	8	4.09	3.54[3]	2960	2560	1600	1390	11.9	A	9.2	A	19	28[3]	B+
5	56.5	54.8	43	37.3	35	36	7.5	—	3.9[3]	—	2820	—	2170	15.9[3]	BA	12.6[3]	BA	18-19	NE	A— (B+ with semiautomatic transmission)
None	57.7	57	42.8	41	35.2	35.2	7.7	3.9	3.6[3]	2790	2570	1920	1770	11.5	A	10.9[3]	A	15[3]	NE	A (A— with *Dynaflow*)
None	56.3	54.3	41.8	38	37.8	37.3	7.5	3.9	—	2790	—	2090	—	•	•	•	•	•	21.6	A— (B+ with semiautomatic transmission)
7	57.2	57	40.5	34.8	37.8	35.8	8.0	3.91	2.99[3]	2830	2160	1890	1440	12.8[3]	A	9.0[3]	A	19.5[3]	25.9[3]	A

NE — not entered
E — excellent
G — good
A — average
BA — below average
• — Information not available.

BRAND NAME	N.Y.C. Delivered Price[1]	Estimated Depreciation	Wheelbase, Inches	Over-all Length, Inches	Over-all Width, Inches	No. of Cylinders	Manufacturers' Rated Horsepower at Revolutions per Minute	Hp. per cu. in. Displacement	Percentage Weight on Front	Shipping Weight (lb.)	Compression Ratio: Standard	Compression Ratio: Optional	Steering Factor	Brake Area, Sq. Inches	Brake Factor	Tire Size
Price Group 3 (Cont'd)																
Hudson 6 Pacemaker	2239	High	120	202	77	6	112 @ 4000	.48	56[3]	3510	6.7	7.2	4.8	140	33	7.10x15
Oldsmobile Super 88	2248	Low	120	204	76	V8	135 @ 3600	.44	54[3]	3605	7.5	—	4.6	192	44	7.60x15
Kaiser Special 511	2253[9]	Very High	118.5	210	74	6	115 @ 3650	.51	•	3150	7.3	—	•	176	45	6.70x15
Nash Ambassador Super	2262	Very High	121	211	78	6	115 @ 3400	.49	55[3]	3350	7.3	—	3.5	154	38	7.10x15
Price Group 4																
De Soto Custom	2332	Med.	125.5	208	75	6	116 @ 3600	.45	55	3685	7.0	—	4.7	201	45	7.60x15
Buick Super 50	2344[9]	High	121.5	206	80	8	128 @ 3600	.49	•	3755	6.9	7.2[2]	•	162	36	7.60x15
Hudson 6 Super	2361	High	124	208	77	6	123 @ 4000	.47	•	3590	6.7	7.2	•	159	37	7.10x15
Mercury Merc-O-Matic	2404	High	118	207	77	V8	112 @ 3600	.44	53	3470	6.8	—	4.6	159	38	7.10x15
Chrysler Windsor 6	2442	Very High	125.5	207	75	6	116 @ 3600	.46	53	3775	7.0	—	4.7	201	44	7.60x15
Packard 200	2510	High	122	210	78	8	135 @ 3600 138[2] @ 3600	.47 .48	56[3]	3680	7.0	7.5[3]	•	167	37	7.60x15
Oldsmobile 98	2546	High	122	208	81	V8	135 @ 3600	.44	•	3872	7.5	—	•	192	41	7.60x15
Price Group 5																
Hudson Commodore 8	2644	High	124	208	78	8	128 @ 4200	.50	•	3655	6.7	7.2	•	159	36	7.10x15
Hudson Hornet	2644	High	124	208	78	6	145 @ 3800	.47	56[3]	3600	7.2	6.7	5.8	159	37	7.10x15
Buick Roadmaster	2916[9]	Very High	126	211	80	8	152 @ 3600	.47	•	4240	7.2	—	•	208	42	8.00x15
Chrysler New Yorker	2952	Very High	131.5	213	75	V8	180 @ 4000	.54	54	4260	7.5	—	6.0	201	40	8.20x15
Packard 300	3070	Very High	127	218	78	8	150 @ 3600	.46	•	3980	7.0	7.8	•	208	44	8.00x15
Price Group 6																
Chrysler Imperial 8	3263[9]	Very High	145.5	230	80	V8	180 @ 4000	.54	•	4350	7.5	—	•	260	51	8.90x15
Lincoln	3307	High	121	215	77	V8	154 @ 3600	.46	•	4085	7.0	—	•	196	41	8.00x15
Cadillac 62	3404	Low	126	216	80	V8	160 @ 3800	.48	52.5	4010	7.5	—	4.7	225	47	8.00x15
Packard 400	3685	Very High	127	218	78	8	155 @ 3600	.47	•	4180	7.8	—	•	208	42	8.00x15
Lincoln Cosmopolitan	3975	Very High	125	223	78	V8	154 @ 3600	.46	•	4430	7.0	—	•	196	38	8.20x15
Cadillac 75	5184	Very High	147	236	80	V8	160 @ 3800	.48	•	4560	7.5	—	•	259	49	8.20x15

[1] Not including city sales tax.
[2] With automatic or semiautomatic transmission.
[3] With overdrive.
[4] With front seat at maximum adjustment.
[5] With seats unoccupied.
[6] With standard engine components, e.g., pumps, generator, fan, etc.
[7] In third gear of overdrive.
[8] Under test conditions.
[9] Cost of spare tire not included in price.

Percent Overload on Tires	Usable Seating Widths, Inches: Front	Usable Seating Widths, Inches: Rear	Maximum Leg Room, Inches[4]: Front	Maximum Leg Room, Inches[4]: Rear	Headroom, Inches[5]: Front	Headroom, Inches[5]: Rear	Min. Road Clearance, In.	Engine to Rear Wheels Gear Ratio: Standard	Engine to Rear Wheels Gear Ratio: Optional	Engine Revolutions Per Mile: Standard	Engine Revolutions Per Mile: Optional	Piston Speed in ft./min.: Standard	Piston Speed in ft./min.: Optional	Acceleration Time in Seconds: 20-50 m.p.h.		Acceleration Time in Seconds: 40-80 m.p.h.		M.p.g. at 50 m.p.h. or average in Country Driving	M.p.g. - AAA Economy Run	RATING
8	64	57.8	41.5	44	38.8	38.8	6.8	4.1	3.19[2]	2970	2310	1920	1490	15.2[7]	BA	12.0[7]	BA	16	NE	B+ (B— with *Super-Matic* drive)
None	57.5	57	40	36.5	37.8	35.5	8.5	3.64	3.42[2]	2600	2450	1490	1400	10.9[2]	G	8.0[2]	G	19[2,8]	NE	A—
5	64	63	43	40	37.2	36	7.8	3.91	3.54[2]	2890	2610	2110	1900	•	•	•	•	•	24.7	B
None	59.5	52.5	41.5	39.5	35.2	34.8	8.2	4.1	3.54[2]	2970	2560	2170	1870	12.3[2]	A	12.2[2]	BA	16	24.9[2]	B
None	56.3	54.3	41.8	38	37.8	37.3	7.5	3.9	3.73	2790	2670	1970	2000	10.9	G	13.5	BA	16[2,8]	19.9[2]	B+ Semiautomatic transmission standard equipment.
None	64.4	64.9	43.3	43	35.1	36.1	7.8	3.9	3.6	2790	2570	1920	1770	•	•	•	•	•	NE	B+ (Available only with *Dynaflow*.)
10	64	57.8	41.5	44	38.8	38.8	8.1	4.1	4.55	2970	3290	2170	2400	•	•	•	•	•	NE	B+ (B— with *Super-Matic*)
7	57.2	57	40.5	34.8	37.8	35.8	8.0	—	3.31	—	2400	—	1600	12.0	A	10.7	A	16[5]	NE	B+
None	56.5	54	40.5	40	37.8	37.5	7.2	—	3.9	—	2790	—	2090	10.1[2]	G	11.1[2]	BA	17[2]	20.9[2]	A— (B+ with semiautomatic transmission)
None	57.2	55.5	41.5	42	38.8	36.8	7.5	3.9	2.96[2]	2790	2120	1740	1320	10.5[2]	G	9.5[2]	A	16[2]	22[2]	A—
6	64	64.8	43.6	42.3	35.6	35.4	8.4	3.9	3.64[2]	2790	2600	1600	1490	•	•	•	•	•	NE	B+
11	64	57.8	41.5	44	38.8	38.8	6.8	4.1	3.58[2]	2970	2590	2230	1940	•	•	•	•	•	NE	B (B— with *Super-Matic*)
10	64	57.8	41.5	44	38.8	38.8	6.8	4.1	3.58[2]	2970	2590	2230	1940	7.8[2]	E	6.6[2]	E	13.5[2]	22.6[2]	B
7.5	64.4	64.9	43.3	43	35.1	36.1	8.2	3.6	3.9	2560	2770	1840	1990	•	•	•	•	•	NE	A— *Dynaflow* standard equipment.
None	56.5	54.5	41.5	41.3	37	36.2	8.5	—	3.73	—	2560	—	1550	7.0	E	7.7	E	16.5[2]	NE	B Semiautomatic transmission standard equipment.
None	62.8	62	43.8	46.5	36	35.2	8.7	3.9	2.96[2]	2770	2100	1960	1490	•	•	•	•	•	20.9[2]	B+
None	54.8	48.8	41.9	•	38.8	37	8.6	3.73	—	2460	—	1490	—	•	•	•	•	•	21.2[2]	B+
None	59	59.5	44	39.6	36.4	35	8.3	3.91	3.31[2]	2780	2350	2030	1710	•	•	•	•	•	25.4[2]	A—
None	58.2	56	39.5	37.5	37.2	37.5	8.3	—	3.36[2]	—	2390	—	1440	8.0[2]	E	7.2[2]	E	18[2]	21.5[2]	A
6	62.8	62	43.8	46.5	36	35.2	8.7	—	3.54[2]	—	2520	—	1780	•	•	•	•	•	NE	A— Depreciation exceptionally high.
5	59	52	43.6	38.5	36.1	35.3	8.3	3.91	3.31[2]	2690	2270	1960	1660	•	•	•	•	•	17.1[2]	A—
8	64	57	43.1	•	37	35	8.4	4.27	3.77	2930	2590	1770	1560	•	•	•	•	•	19.9[2]	A— Depreciation high.

NE — not entered
E — excellent
G — good
A — average
BA — below average
• — Information not available.

a standing start, for accelerations so expressed are not nearly as significant from the car user's standpoint as figures based on a method intended to reflect normal driving and road conditions.

The ratings of the cars as a whole are based partly on actual tests of 26 of the models by CR's engineers and consultants, and partly on reports from consultants in the field. (It was not possible to test thoroughly all the cars listed, in the time available; however, the cars not closely studied were for the most part in the high price ranges which constitute only a small percentage of the American automobile market.)

Price Divisions

The cars reported were the lowest priced four-door sedans, except for the following: *Henry J*, two-door sedan; *Plymouth Concord*, two-door sedan; *Nash Rambler*, two-door convertible; *Dodge Wayfarer*, two-door sedan; the *Crosleys* and *Willys'*. In some cases, where automatic transmissions were available as extra equipment, the cars with such transmissions have been included, also. The delivered prices include a spare tire unless otherwise noted, but do not include city sales tax. (Furnishing of spare tires with cars was discontinued by government order several months ago, and prices of cars reduced by an amount equal to the *factory* cost of tire and tube. The consumer, however, who desires a spare tire is required to purchase the tire and tube at the far higher *retail* price.)

Price Group 1

Chevrolet Styleline Special is CR's first choice in this group for those who want dependable, economical transportation. This car has low depreciation (minimum loss of turn-in value from year to year). Its price is lower than that of any other four-door sedan in this group. Acceleration, though not outstanding, will be all that most people need or can use safely. *Plymouth Cranbrook* is second choice provided the riding and handling properties are found satisfactory. As pointed out in the full report on the *Plymouth Cranbrook* in the July 1951 issue of CONSUMERS' RESEARCH BULLETIN, the motion of this car is such that those who are subject to car sickness may find it objectionable; in case of doubt, it should therefore be tried out on several types of roads with members of the family in the rear seat. Its initial cost is about $200 more than the *Chevrolet Styleline Special* ($110 more than *Chevrolet DeLuxe*) and about $175 more than *Ford 6*; the percent of depreciation falls into the medium range, higher than *Chevrolet* and about the same as *Ford V-8*. The price disadvantage of the *Plymouth* is believed due in part to the smaller production of Chrysler cars as compared to the General Motors and Ford lines. *Ford 6* and *Ford 8* are close together for third choice in the group. Gasoline economy and acceleration were about the same for both the *Fords*. Several complaints have been received of burned points requiring frequent replacements, mediocre hill-climbing ability, and poor gasoline mileage. Fourth choice is the *Studebaker Champion*; this is a good car. The main criticism against it is its relatively poor turn-in value, which should be investigated locally — and not with *Studebaker* dealers only.

Price Group 2

Pontiac Chieftain 8 is our first choice in this group, although some engineers are of the opinion that its engine is not now outstanding and will likely be supplanted by a V8. The low depreciation of the *Pontiac* makes it a logical choice for those who want a car out of the first price group, yet at not too great additional cost. It is felt that the extra $70 for the *Pontiac 8*, as compared with the *Pontiac 6* (second choice in the group and a good conservative car), is a worth-while expenditure. The *Dodge Wayfarer* with standard transmission is a close third choice; its main disadvantage is its relatively high depreciation. (Note, too, that this car is not available in a four-door sedan model.) Comments regarding checking on the ride of the *Plymouth* under Price Group 1 also apply to *Dodge*.

Price Group 3

For first choice either *Buick Special* or *Mercury*, both with standard transmissions, with *Oldsmobile Super 8-88* a close third. The chief disadvantage of the *Oldsmobile* is the necessity for using high-test gasoline. With the present and possible if not certain future restrictions on tetraethyl lead allotments, it is doubtful if the octane rating of premium gasoline can be kept up to about 90, which makers recommend for the *Oldsmobile* and some other high-compression engines. If the octane number should have to be greatly reduced, required changes in these high-compression engines might cost from $15 to as much as $300 (the figure given by Fortune as applying when completely new cylinder heads are required).

Price Group 4

First choice *Packard 200*; second choice *Chrysler Windsor* with standard transmission, in spite of the fact that its depreciation is higher than other cars in its group. *Buick 50, Mercury with Merc-O-Matic* and *Oldsmobile 8-98* seem pretty close together for third choice.

Price Group 5

Buick Roadmaster is first choice; *Packard 300*, second choice.

Price Group 6

Cadillac 62 is first choice; *Lincoln Cosmopolitan*, second.

Power Lawn Mowers

OF THE TEN MOWERS reported in the present article, eight were equipped with 4-cycle gasoline engines. The *Jacobsen* and the *Mow-Master* had 2-cycle engines. In general, 2-cycle engines are not as desirable as 4-cycle engines because of the trouble of mixing oil with the gasoline to provide for proper lubrication of the engine, and the fact that the smoke the 2-cycle engine emits from the exhaust on account of its burning of oil with the gasoline is likely to be objectionable to the operator. Breathing this smoke may be undesirable also from a health standpoint. Electrically-powered mowers were not included, because few inquiries have been received for such mowers and because of the serious difficulty they present with their long trailing power-supply cords on any large lawn or a lawn with trees and shrubbery, which would make them a questionable purchase for most users.

As the horizontal-blade vertical-shaft type of mower seems to have found a definite place in lawn care equipment, two mowers of that kind were included. These mowers, while potentially more dangerous than the horizontal-reel type, are unsurpassed for keeping weeds and grass under control in areas not kept in lawn, and for homes where lawns are not cut frequently and grass grows too high in the period between cuttings for the standard lawn mower. The horizontal-blade mowers also do a better job of mowing on lawns that have dandelions, buckhorn, and other weeds.

The size of a mower (width of cut) is important; mainly it will depend upon the size of the lawn. For a small lawn, a 16-, 17-, or 18-inch mower will serve. These smaller mowers have the advantage of being lighter and more maneuverable than the larger ones. A recent survey by a large manufacturer indicated that the 21-inch power mower was by far the most popular, with the 18-inch and 17-inch ranking second and third, respectively (but close together), in demand.

With the exception of the *Reo*, all the mowers met the Federal specification for hardness of the cutting-reel blades. Hardness of the bed-knives of the revolving-reel mowers could not be checked accurately with the *Ames* or *Rockwell* hardness testers because of the shape of this part, but they were tested with a file and all were judged to be of satisfactory hardness. All mowers except as noted in the listings met the Federal specification of not less than 10 cuts per foot of travel (i.e., number of reel knives passing over cutter bar for each foot of travel of the mower). Ratings are cr51.

Rotating-Reel Mowers

A. Recommended

Toro Sportlawn 21 (Toro Mfg. Corp., Minneapolis) $129.50. Mower: Width of cut, 21 in.; height of cut adjustable from ½ in. to 1¾ in. V-belt drive from engine to jack shaft; roller chain drive from shaft to cutter reel. *Chain drive fully enclosed by guard* (very desirable). Cutter bar adjusted by opposed screws which were readily accessible. General lubrication through oil cups and oil holes. Ratchet housing and gear teeth require repacking with grease once a year. Handle could be adjusted to suit height of operator, and had a small amount of up-and-down movement (desirable, as it reduced amount of vibration and shock transmitted when ground was not level). Rubber handle grips. Engine, *Clinton*, rated 1.3 hp. at 3600 rpm.; clutch, split "V" pulley in which pulley halves close in on sides of belt when clutch is engaged; rope-pull starter. Maximum speed, about 4.3 m.p.h. (very good). Weight, 106 lb. A very well-made and well-finished mower. First choice in group. **2**

* * *

Eclipse Rocket (The Eclipse Lawn Mower Co., Prophetstown, Ill.) $136. Mower: Width of cut, 20 in.; height of cut adjustable from ¾ in. to 1½ in. Cuts per ft. of travel, 8.8 (below Federal Specification requirements). V-belt drive from engine to jack shaft; roller chain drive from shaft to cutter reel. Chain not guarded (guarding is desirable for safety and to prevent clogging with grass). Reel axle subject to clogging with grass. Equipped with bracket for power sharpener unit (available at extra cost). Handle adjustable for height and not rigidly connected (desirable). Rubber handle grips. Cutter bar adjusted by spring-loaded opposed screws which were readily accessible. Lubrication through oil cups. Engine, *Briggs & Stratton*, rated 1.1 hp. at 3200 rpm.; clutch, friction type; rope-pull starter. Cutting speed controlled by hand throttle. Maximum speed, 3.7 m.p.h. (good). Weight, 118 lb. (relatively heavy). A sturdy, well-made mower. **2**

National, Model 9 (National Mower Co., St. Paul) $125. Mower: Width of cut, 21 in.; height of cut adjustable from 1 in. to 2 in. V-belt drive from engine to jack shaft; roller chain drive from shaft to cutter reel (chain only partially covered). Reel had grease-packed roller bearings. General lubrication through oil cups. Handle adjustable for height, but rigidly fixed to mower (latter is undesirable). Rubber handle grips. Cutter bar adjusted by opposed screws which were readily accessible. Engine, *Briggs & Stratton*, rated 1.5 hp. at 2800 rpm.; clutch, slipping-belt type; rope-pull starter. Cutting speed controlled by hand throttle. This mower, which was the lightest of its type tested, was very maneuverable, and because of its open construction, free from trouble by clogging with grass. Maximum speed, approximately 4.5 m.p.h. (very good). Weight, 100 lb. **2**

Pincor, Model P-22 (Pioneer Gen-E-Motor Corp., Chicago 39) $174.50. Mower: Width of cut, 22 in.; height of cut adjustable from ½ in. to 2½ in. (good) by turning two spring-held knobs. Cuts per ft. of travel, 9 (below Federal Specification requirements). Both reel and wheels driven by roller chain partially guarded. Enclosed multiple-disk clutch. Had a shear pin to prevent damage in the event reel should be jammed by a twig, stone, or other foreign object (desirable). Reel and bed knife assembled as a unit for easy removal. Cutter bar adjusted by screws and lock nuts, accessible and convenient. Built-in rope starter with spring rewind; cord required frequent replacement. Sealed ball bearings on reel, other bearings oil-impregnated. Handle adjustable for height and not rigidly connected to mower (desirable). Built-in reversing gear provided for power-sharpening. Engine, *Pincor*, rated at 1.5 hp. Maximum speed, 4.4 m.p.h. (very good). Weight, 122 lb. A well-built, sturdy mower. **3**

National Model 9

B. Intermediate

Cooper Klipper, Model ACA-20 (Cooper Mfg. Co., Marshalltown, Iowa) $139.50. Mower: Width of cut, 20 in.; height of cut adjustable from ¾ in. to 2½ in. V-belt drive from engine to jack shaft, partially guarded. Roller chain drive from shaft to cutting reel, fully guarded (desirable). Reel had grease-packed roller bearings. Other bearings oil-impregnated bronze, said not to require periodic lubrication. Handle not rigidly connected (desirable). Rubber handle grips. Cutter bar adjustable by two spring-loaded screws which were not too conveniently located. Side frames and several other parts of zinc alloy die castings (permanence of these may be open to some question). Engine, *Briggs & Stratton*, rated 1.5 hp. at 2800 rpm.; clutch of slipping-belt type; rope-pull starter. Cutting speed controlled by hand throttle. A well-built mower. Maximum speed, approximately 3.8 m.p.h. (good). Weight, 111 lb. **2**

Pennsylvania, Model T-15 (Pennsylvania Lawn Mower Div., American Chain & Cable Co., Camden, N.J.) $132. Mower: Width of cut, 21 in.; height of cut adjustable from ½ in. to 1½ in. Cuts per ft. of travel, 8.6 (low). V-belt drive from engine to jack shaft; roller chain drive from shaft to cutter reel. Chain not

Pincor Model P-22

Cooper Klipper Model ACA-20

guarded. Reel axle readily clogged with grass. Handle adjustable for height but rigidly connected to mower (undesirable). Rubber handle grips. Cutter bar adjusted by opposed screws which were not readily accessible, making adjustment difficult. Only mower tested which was equipped with a tool box. Wheel and pinion bearings require repacking with light grease each season, and gear teeth with heavy grease. Engine, *Briggs & Stratton*, rated 1.5 hp. at 2800 rpm.; clutch, split "V" pulley type; built-in rope starter with spring rewind. Cutting speed controlled by hand throttle. Maximum speed, 4.3 m.p.h. (very good). Weight, 128 lb. (relatively heavy). **2**

Jacobsen Manor (Jacobsen Mfg. Co., Racine, Wis.) $181. Mower: Width of cut, 21 in.; height of cut adjustable from 5/16 in. to 2¼ in. by raising or lowering two rubber-covered caster-type wheels in front which are locked in position by set screws. Mower had two rubber-covered drive wheels (8½ in. diameter, 3¼ in. wide) at rear. These were driven by a roller chain (partially enclosed) with single-plate clutch controlled from handle. Belt drive to reel, with separate split-pulley clutch controlled by short handle on mower. This propels the mower under its own power without the cutting reel operating, very desirable when crossing driveways, etc. Handle not rigidly connected to mower (desirable). Cutter bar adjusted by opposed screws which were readily accessible. Lubrication through grease fittings with grease gun provided. Engine, *Jacobsen*, 2-cycle, rated 1.5 hp. at 3600 rpm.; built-in pull starter with spring rewind. Maximum speed, 3.1 m.p.h. (slow). Weight, 121 lb. A very well-built mower with an engine that was exceptionally easy to start and very quiet. Would be rated *A. Recommended* for those who would not find objectionable the smoke from the 2-cycle engine. Rear-wheel drive has the advantage of permitting mower to cut closer to trees, edges of lawn, etc., than the side-wheel driven mowers, but is not as desirable as the latter for rough or hilly ground. **3**

C. Not Recommended

Reo De Luxe Trimalawn RE-25 (Reo Motors, Inc., Lansing, Mich.) $210. Mower: Width of cut, 25 in.;

Jacobsen Manor

Pennsylvania Model T-15

Reo De Luxe Trimalawn RE-25

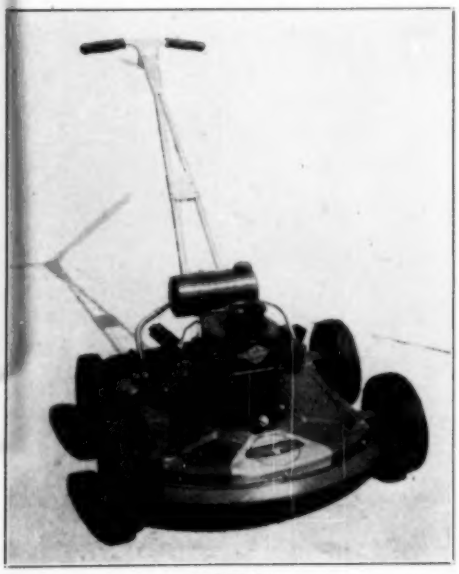
height of cut adjustable from ¾ in. to 2¾ in. in four positions locked by nut and bolt in each bracket. Cutting unit itself had sled-like runners rather than wheels. Cutter bar adjusted by screws with lock nuts. Handle adjustable for height but rigidly connected to mower (undesirable). Handle grips made of plastic. Cutter bar adjusted by opposed nuts, not readily accessible. Power unit was a small three-wheel (two 10-in. diameter semi-pneumatic-tired drive wheels with a 6-in. diameter wheel in rear). Double V-belt drive from engine to jack shafts, well guarded. Roller chain drive from jack shaft to a second jack shaft from which a second roller chain transmits power to reel. Lubrication through grease fittings; cutting reel had sealed bearings. Engine, *Reo*, rated at 1.75 hp.; clutch, slipping-belt type; built-in pull starter with spring rewind. Maximum speed, 3.2 m.p.h. (slow). Hardness of cutter blades fell far short of Federal Specification requirements. Like *Jacobsen*, had the advantage of being able to cut close to trees, etc., but sled-like runners had a tendency to dig in when ground was soft and uneven. Weight, 152 lb. (heaviest of the mowers tested). 3

Rotary Flat-Knife Type, Disk or Arms Rotating in a Horizontal Plane

With respect to the rotary flat-knife type of mower for home lawns, it would be well for the prospective purchaser to examine the appearance of a section of lawn upon which a mower of the make and type being considered has been used, to see whether the lawn has the desired finished, even appearance.

B+

Whirlwind (Toro Mfg. Corp., Minneapolis) $159.50. Mower: Width of cut, 22 in.; height of cut adjustable from 1 in. to 3½ in. by changing position of wheels on axle plates. Cutter arm attached directly to vertical motor shaft through a slip clutch. Cutter arm of steel with two cutting edges, one on each end, which can be sharpened with a file. Not self-propelled (this type of mower is better not self-propelled; there is a self-propelled *Whirlwind*, but this was not tested by CR). Handle adjustable in height and rigidly attached, not a disadvantage for this type of mower. Manufacturer recommends greasing wheel bearings every 48 hr. of use. Blade was well guarded. Rear guard could be adjusted to suit height of cut. Engine, *Briggs & Stratton*, rated 2.5 hp. at 3600 rpm.; rope-pull starter. Mower was somewhat hard to push, and like those previously tested of this type, left windrows when the grass was very high. Weight, 100 lb. Considered the best mower of its kind so far tested by CR. 3



Whirlwind

B

Mow-Master Special, Model RM-058 (Propulsion Engine Corp., Kansas City, Kans.) Mower: Width of cut, 20 in.; height of cut adjustable at 1 in., 1¾ in., and 2½ in. by raising or lowering wheels in holes on frame. Cutter arm attached directly to vertical motor shaft. Equipped with shear washer to prevent damage if blade should be blocked by a heavy object or one that could not be cut. Handle not rigidly connected, but motion is restricted so that operator can maneuver mower on two rear wheels by lowering handle. Machine was not well guarded at front and rear. Engine, vertically-mounted 2-cycle, rated at 2.25 hp.; not self-propelled (desirable), rope-pull starter. This mower did a good job and had ample power. Would be rated *B+* for those who would not find smoke from the 2-cycle engine objectionable. Weight, 54 lb. (by far the lightest of the power mowers tested up to this time). Note: Because of governmental restrictions on use of aluminum, *Model RM-058* has been discontinued and replaced with *Model RM-201* ($119 f.o.b. factory); on this the base is of molded plywood instead of aluminum. This later model is available with either the same 2-cycle engine as the *RM 058* or a 4-cycle *Clinton* engine; it is believed the latter should be preferred. 2

Note on a GE Automatic Washing Machine

SOME owners of *General Electric Model AW6A* may need to obtain a pump baffle made of plastic, which is available from the manufacturer at 30 cents plus postage. Without this device, if a sock or handkerchief should go over the edge of the tub into the outer casing, the result may be an expensive repair job; it is understood that the pump and its motor might be seriously damaged if jammed by such a piece of clothing. (The baffle that is made of wires and is located near the top of the washtub does not prevent very small articles from washing over the top of the tub into the space between the tub and the outer casing of the washer.)

Antibiotics — Penicillin and Others

By Erwin Di Cyan, Ph. D.

DESCRIPTIVE terms such as *sensational, phenomenal, colossal,* and *miraculous* are usually associated with circus barkers, or with the gentry who publicize the release of new movie films. Perhaps these terms have become tarnished through misuse, but if their use is at all warranted, they may be justly applied to the antibiotics, for they do indeed seem to merit the appellation *miraculous.* Because their use has solved old problems of therapy, a re-evaluation of a few of the many aspects of antibiotics may clarify in the mind of the consumer some concepts surrounding their use, or bring older concepts up to date.

Antibiotics, such as penicillin and others, are substances which are produced by microorganisms, and are used in medicine to inhibit the growth of other microorganisms. All antibiotics originate from microorganisms and are produced commercially by culturing the proper strains of these minute units of living matter. It is interesting to note that long before the first antibiotic was produced it was observed that earthworms (which are not microorganisms) rarely cross the path over which they have previously passed. It was believed that these worms perhaps exuded certain substances which were poisonous to them and which they avoided by not recrossing their own path.

Microorganisms, particularly those from the genus *Penicillium* or *Streptomyces,* are known to elaborate certain substances which, if not directly poisonous to other microorganisms, are at least inimical to their existence. These substances, which we term antibiotics (anti-bios — against life), are active against germ life in a unique fashion.

Antibiotics do not kill microorganisms in the same sense as bichloride of mercury or some antiseptics do. Essentially, antibiotics are effective in infections by *inhibiting the reproduction* of microorganisms responsible for the infection. Antibiotics inhibit reproduction of microorganisms by combining with enzymes or other materials in the body that are needed by microorganisms for their metabolism (the biochemical processes that go on in living cells). If the microorganisms are thus deprived of such materials, they are unable to thrive and reproduce. This mechanism is known as competitive inhibition, and antibiotics are thus said to be in preferential competition with microorganisms.

The condition may be nullified if certain drugs or other substances which contain such materials are taken by a patient under treatment with antibiotics. The effect of the antibiotics can thus be nullified. For example, certain drugs supply the sulfhydryl group of chemical substances with which antibiotics and microorganisms are in preferential competition; if drugs containing that group are taken by a patient who is being treated by penicillin, the effect of penicillin will be nullified, for although penicillin deprives microorganisms of their necessary sulfhydryl group, more of that group being brought in from outside sources as a medicine will enable the microorganisms to multiply. These facts are typical and are a good illustration of the reasons why antibiotics should not be used for self-medication by a layman. (Somewhat the same mechanism applies with the sulfonamides for, although sulfonamides are of an entirely different nature, their effect is reduced if the patient, while treated by sulfonamides, also takes a vitamin B complex.)

With the advent of a number of new antibiotics, and with the increase of knowledge with respect to their optimum use, the choice of an antibiotic, the dose, frequency, and duration of administration are matters which require the decision of a competent physician. It is therefore with good reason that antibiotics are available only on prescription, although certain dosage forms, as some ointments for topical (local) use and tyrothricin throat lozenges, may be legally sold without prescription in so far as federal regulations are concerned. On the state and municipal levels, however, certain local administrations prohibit the sale of antibiotics in *any* form. In New York City, for example, antibiotic throat lozenges or bandages impregnated with an antibiotic are not permitted to be sold without a prescription.

No categorical statement can be made regarding the best antibiotic, for one particular antibiotic may be twice as effective in a given condition as the next best antibiotic, yet only moderately or mildly effective in another condition for which still a third antibiotic is the most effective. Antibiotics have been used and found effective in a great number of diseases including amebiasis, dysentery, pneumonias of bacterial, pneumococcic or viral nature, rickettsial infections such as Rocky Mountain spotted fever and Q fever, typhoid, respiratory infections such as whooping cough, genitourinary infections, pulmonary infections as tuberculosis, veneral infections such as syphilis, gonorrhea, and lymphogranuloma and certain other infectious conditions. Ointments for topical or eye infections and sprays for nose and throat use are also available.

All antibiotics including penicillin, streptomycin, aureomycin, tyrothricin, bacitracin, terramycin, and chloromycetin originate from microorganisms and are manufactured by culturing the proper strain of microorganisms (usually bacteria or molds). Chloromycetin although originally derived from a microorganism found in the soil is the only one now made synthetically. Bacitracin and tyrothricin are used topically, and other antibiotics are used orally or by injection. For effectiveness, the concentration of any internally administered antibiotic must reach a definite level in the blood, and that level must be maintained (within certain limits) for continued effect. Such a level is obtained by repeated oral administration or injection. Antibiotics such as aureomycin or terramycin usually give satisfactorily high and sustained blood levels when taken orally. Penicillin gives an adequate blood level, but since penicillin is quickly excreted the level is not maintained. Penicillin in oil and beeswax injection was developed to prevent rapid excretion, and more recently, procaine penicillin has been favored since the latter gives sustained blood levels of the antibiotic.

Penicillin has also been administered in conjunction with certain inhibitory agents as carinamide which sends penicillin back into circulation in the blood stream, by blocking its excretion through the kidneys. Preferential competition, which is responsible for the inhibitory effect of penicillin on microorganisms, is exerted here by a rather simple chemical, carinamide.

There is an increasing trend toward the use of tablets of penicillin administered orally, for recently developed tablets of procaine penicillin protected by buffers suffer only a little inactivation by the acid in the stomach and when absorbed maintain reasonably satisfactory levels of penicillin in the blood. Irrespective of the choice of the antibiotic, the parenteral route (intramuscular or in some instances intravenous injection) is still the important method of administration in acute or grave infections such as peritonitis, endocarditis, or syphilis.

The versatility and in certain instances the interchangeable role among certain antibiotics is fortunate, for occasionally microorganisms develop a resistance to an antibiotic, to streptomycin, for example; they will succumb to another suitable antibiotic. More frequently, an individual is allergic to penicillin, in which event another antibiotic may be used that does not carry that hazard. It must be borne in mind, too, that antibiotics are not necessarily innocuous, for, in addition to their specific effects, they may be toxic when not properly used. However, the minute quantities of antibiotic substances found in the waste products from antibiotic manufacture are employed in the fortification of feed for livestock and poultry for accelerating their growth and weight. Whether such material could be useful and without toxic or other harmful effect in the diet of children is currently under investigation.

The consumer is often startled by the high price he is obliged to pay for the newer antibiotics. Often he feels he is being victimized and points to the decline of price in penicillin, which is now sold at about 10 percent of the price that it commanded in early 1940. That example is one which indicates that the high prices of the new antibiotics (in some instances about $1.50 per dose) are not unreasonable. The cost of research is more than high — it is astronomical, and this is particularly true where biochemical and medical research are in question. Research costs are budgeted, but it is only infrequently that a finished development remains within the expected cost. The results of pharmaceutical research cannot be foretold, nor can the time element be reliably estimated beforehand. Development to the point where a product of research is sufficiently advanced for use with human beings requires the integrated efforts of hundreds of various specialists, as well as great quantities of varied materials, and often requires construction of elaborate and expensive special equipment. It is proper that the huge outlay for research, development, and production, which is often of the order of millions of dollars, should be amortized within a reasonable time. There is no better way to recover the costs of such investment in research than to apportion those costs among the users of the drugs that result from the efforts of the medical and other specialists carrying on the investigations.

Corrections and Emendations to Consumers' Research Annual Cumulative Bulletin (ACB) and Monthly Bulletins

Straight-Suction Vacuum Cleaners
Col. 62
ACB '50-'51

Under listing of *Air-Way Sanitizor Model 55A*, delete last sentence in listing. Changes in the new *Model 66 Sanitizor* were not deemed sufficient to justify the expense of testing it and accordingly the planned test of the new model was not completed.

35 mm. Camera
Page 23
May '51 Bulletin

Nikon, with f:2, 50 mm. *Nikkor* lens. According to information received recently, this camera is no longer in production. A similar *Nikon, Model S*, equipped with built-in synchronizer for strobe or flash, is priced at $235 plus $24 tax.

Off the Editor's Chest

(*Continued from page 2*)

that are called for to induce consumer buying in large volume.

Although there has been vociferous propaganda emanating from Washington, D. C., that make out the chief enemy on the economic front to be *inflation* or *high* prices, there is a growing recognition in informed economic circles that *lower* prices or *deflation* is the last thing Washington officialdom wants. Hardly had the New York City price war made headlines throughout the country when Senator John Sparkman of Alabama announced that his Committee on Small Business would immediately institute hearings on the effects of this "crossfire of a vicious price-cutting war." That doesn't sound like administration enthusiasm for the lowering of prices to consumers or a belief in the wisdom of the Supreme Court's decision. The price war also came at a most inopportune time for those officials who have been pushing actively for more stringent price controls and the power to set ceiling prices on nearly all essential consumer commodities. What various dealers in many lines of goods sold to consumers wanted was not *ceiling* but *floor* prices, to prevent spectacular below-cost sales that threatened them with insolvency if the tendency should continue or extend. To reverse suddenly their position of ostensibly favoring the lowering of retail prices would make ridiculous the pronouncements of those in Washington officialdom and sympathetic economists in recent months, who had loudly cried that "inflation is coming."

The recently announced OPS ceiling prices on clothing and textiles, for example, simply gave the clothing trade an expensive job of paper work to do. It is no secret that the textile trade has been in the doldrums for many a month. Women who had been counted on to buy anything put on the clothing racks as they did in the scarcity days of World War II have stayed away from dress departments in droves and nobody has yet been able — in print, at least — to figure out why; ignoring, of course, the obvious conclusion that prices were too high for the quality and style offered. Some attempt has been made to explain away the lack of clothing sales by blaming consumers' constant attention to their television receivers.

Television, however, is also having its troubles. One informed observer reports that there are enough television sets now in warehouses to provide all the sets consumers are likely to buy during the coming Christmas season and even to carry stocks over into next spring. Appliances also are plentiful.

The chief shortage is in the wool field where the world supply does not equal the demand and prices are still very high. Synthetic fibers, however, are making great strides in their development and may be expected to supplant wool in the low and moderate price ranges in many cases. The well-known preference of most men for wearing their old clothes will undoubtedly be a factor in easing the buying pressure in this field. In short, it looks as if, barring the major outbreak of an armed conflict over a wide area, consumers will not need to worry too much about shortages.

Whether prices come down will depend on a wide variety of economic factors including reduction of taxes, refusal of public officials to lend political support to influential labor groups in their efforts to force wage increases at the expense of others less strategically situated with respect to the seats of power, and the institution of a rigorous program of governmental economy — which Congress can require and enforce whenever it receives the necessary backing of public opinion. These factors all involve political hazards, and no party will undertake to advocate any of them unless forced to do so by informed public demand.

The smaller dealer far from New York City without Macy's and Gimbel's tremendous resources cannot afford to match their price cuts even if he needs to raise money to carry his inventory. Prices are determined by many factors in which taxes, wages, pensions, transportation costs, subsidies to producers of raw materials, elaborate bookkeeping and accounting practices, such as are required by the Office of Price Stabilization and other government bureaus, are important factors. The consumer who looks at the retail price of a product he wishes to purchase and complains that it is high simply because the retailer is making a large profit will be applying his pressure at the wrong point. Our economic system of mass production is capable of turning out tremendous quantities of consumer products at very reasonable cost, but when one or more groups, strategically placed with respect to the assembly line, and in respect to government policies or officials, take advantage of the need for smooth meshing of each operation to hold up the process by demanding a larger cut, the final cost to the consumer is bound to reflect the "shakedown." The expansion of American industry in the last war was so great that unless a monkey wrench is thrown in the works it shows every evidence of being able to provide all the products that the consumer can absorb at the prices now being charged and still produce all the war material that

can be used by our forces or given away abroad to countries that are presumed to be our allies in case of world conflict.

To take a common-sense approach to preparedness is to incur the unpleasant accusation of giving aid and comfort to the enemy. On the other hand, the suspicion has already been voiced in several circles that the Washington-induced war economy is looked upon with favor by those who prefer a high-price scarcity economy to one in which consumer goods are abundantly available at lower prices and competition among manufacturers and merchants for the consumer's favor is keen.

Unthinking consumers who have supported measures for price control in the belief that *price control* is synonymous with or makes for *lower prices* will do well to look beyond the claims made for such measures and examine carefully their actual working out in operation. They should especially consider the quick reaction of the Senate committee, already referred to, that price cutting is a bad thing and must be discouraged. It is well to remember that one of the most marked effects of governmental price fixing in World War II was that the process of trying to hold down the price to an uneconomic level resulted in many cases in the elimination of the product from the market, since farmers, manufacturers, and dealers simply would not produce or distribute an item on which they could not make a living or receive customary returns. As with many advertising claims, the benefits to be derived from such promised protection are almost certain to be greatly exaggerated.

Abridged Cumulative Index of Previous 1951 Consumers' Research Bulletins

Month and Page

Advertising, silverware, misleading July, 29
Allergy, factor in gout July, 29-30
Appliances, automatic features, disadvantages July, 30
Automobiles
  anti-freeze, propylene glycol, limitations Feb., 25
  "battery improvers"† Feb., 17
  damage susceptibility Apr., 10
  defective wiring, fire hazard Apr., 4
  depreciation and operating costs June, 3
  "dry wash"† Apr., 30
  effect of government curtailment orders Mar., 3
  gasoline, winter† Mar., 18-19
  ignition and other locks Apr., 24-25
  1951, preliminary reports† Jan., 17-19; May, 5-7; June, 5-8; July, 5-7
  oil, lubricating, expected mileage July, 4
  power, too great for safety July, 4
  tire, spare, not with new cars July, 3
  tire failures, causes Jan., 19
  waxes and polishes† July, 17-18

Bed sofas, convertible† June, 16-19
Blankets, sheet, foot warmer, electric† Jan., 20-21
Boilers and conversion burners, gas† May, 17-23

Chair, "contour" style July, 23
Citizens, free, America's best asset July, 21
Clothing
  devices for hanging† May, 30
  hose, men's† Apr., 11-12
  hosiery, women's, "snag-resistant" finishes† Feb., 30
  pajamas, men's, cotton† Jan., 24-25
  shoes, children's† Feb., 23-25
  slacks, men's† June, 13
  suits, summer, men's† July, 11-16
  zipper, new† Apr., 12
Consumers' Digest, a new CR service Mar., 17
Corkscrews† July, 19-20
Corrections and emendations† Jan., 25; Feb., 22; May, 16; June, 19; July, 4
Curtains, Fiberglas† June, 28
  shower, plastic† July, 26

Deodorant, chlorophyll household† July, 30
  personal† June, 3
Detergents, household, synthetic† Mar., 20-22
Dishwashers† Apr., 21-22
Dry-cleaning problem, home cold-wave solutions July, 4
Dryer, hair, portable† July, 30
Dryers, clothes† Jan., 22-23

Editorial each issue, page 2
Eyeglasses, care June, 22

Fabrics, rayon, standards July, 3
Fans, electric† June, 14-15; July, 24
Film, paper-protecting† June, 15
Flowers, cut, preserving† July, 24-25
Food
  canning, home, types of spoilage July, 4, 29
  chemical control law needed Mar., 3-4
  frozen orange juice and frozen strawberries† Apr., 8-10
  fruit juices, concentrated, quality July, 3
Fountain pens† June, 8
Freezers, ice-cream† July, 8-10
Fryers, deep-fat† Feb., 21-22

Health hints for hot weather June, 3

Insecticides, use against flies June, 4
Iron stand and cord hanger, combination† Feb., 15
Ironers, electric† Feb., 5-9

Knives, carving† Feb., 10-12

Leather dressing† Mar., 30
Loud-speakers for home radio and phonograph systems† Apr., 17-20

Markers, plant, aluminum† Jan., 30
Mixers, food, electric† Jan., 5-11
Moisture problems in the home Mar., 22
Mothproofing, methods Mar., 29
Motion pictures† each issue

Oil burners, conversion† June, 9-13

Pen, laundry marking† Mar., 11
Penicillin, allergic reactions July, 3
Permanent waves, home† Jan., 12-14
Phonograph records† each issue
  chemical specialties for cleaning† Jan., 4, 29
Photographic equipment
  camera, single-use, novelty† Feb., 18
  cameras, miniature† Feb., 18; May, 23
  plate and film-pack† Feb., 20
  reflex, single-lens† Apr., 22
  roll-film† Feb., 19-20
  developing and developers† Feb., 13-15
  exposure computer† Apr., 25
  lenses, quality† July, 10
  roll-film holder for Graphic cameras† Feb., 20
Polisher, floor, electric† Mar., 19
Prices, lower, not wanted by govt. July, 18

Rabbit repellents for gardens† May, 3
Radio-phonograph combinations, high-fidelity† June, 20-21
Radios, table-model† May, 12-13
Range, electric† June, 24
Ranges, electric, broiler tests† Jan., 15-16
  gas† Mar., 5-11
Razor blades, safety† Mar., 23-24
Refrigerator, Astral (final report)† Jan., 21
  small† June, 21-22
Refrigerators, gas, potential hazard Jan., 16
Rugs and carpets, cleaning Feb., 26

Saws, power, portable Apr., 23-24
Scalp and hair product, mis-branded† June, 4
Screens, house, protective coatings against rusting May, 29-30
  stains on house exterior, removal June, 4
Sewing machines, conversion kits† May, 14-16
  needle-threading device† July, 25
Silver-plating solution† July, 7
Sinks, kitchen† May, 8-11
Soaps, toilet† Mar., 12-14

Tables, utility† Mar., 14
Telescope for the amateur† May, 25-26
Television, improved performance and lower prices July, 4
Television receiver, new† Apr., 7
Thermometers, clinical† Mar., 15-17
  household† Apr., 13-16
Toilet seats† July, 22-23
Tooth decay, prevention July, 4
Towel bars† Apr., 30
Typewriter ribbon, new kind† May, 11

Vitamin preparation (Nutrilite)† Feb., 16-17

Washing machines, automatic† Apr., 5-7

†*indicates that listings of names or brands are included.*

Tennis Balls

TO BE ACCEPTABLE to the United States Lawn Tennis Association for tournament playing, tennis balls must meet requirements as to weight, size, deformation under load, and rebound. Possibly because experts discard balls after they have been in play only a short time the U.S.L.T.A. requirements do not take into consideration the ability of a tennis ball to retain its nap or its rebound with age, or the adhesion of its cover. For the average tennis player these factors are probably of some importance.

CR's tests included an aging test in which the balls were artificially aged for one week at 158°F in a current of fresh air (Geer oven test — A.S.T.M. standard method D 573-48 for accelerated aging of vulcanized rubber) and then tested for rebound. As might be expected, the balls lost rebound in the accelerated aging process, but in no case was the loss sufficient to bring the ball below the U.S.L.T.A. minimum requirements. (The *Olympic* ball was below rebound requirements before and after aging.)

Wear resistance of the covers was determined as a loss of weight after 24 and 48 hours in a cylindrical tumbling barrel. The cylinder wall of this barrel was made of ¼-inch mesh hardware cloth in simulation of racket strings. The adherence of the covers was determined by separating one-inch-wide strips at the rate of 1 inch per minute from the balls using the 0-50 lb. range of a pendulum-type tension tester. The strength of adhesions was much higher than was found in previous tests.

The methods used to test the balls for U.S.L.T.A. requirements conformed in so far as possible with the U.S.L.T.A. regulations as outlined in the Appendix to the 1951 Yearbook. The test for deformation, however, required the use of a special patented test device, which was not available; an alternate method using a testing machine capable of revealing the deformation characteristics of the ball was used.

All of the balls tested met or nearly met the U.S.L.T.A. requirements as to weight, diameter, and deformation. The *J. C. Higgins* ball had too high a rebound as received to meet U.S.L.T.A. requirements, and the rebound of the *Olympic* ball was too low.

Tests made by CR after a period of play in 1940 for the purpose of correlating test results with performance in play indicated that rebound of balls used in play was greater than in balls allowed to age without being used. In the current test, worn (but not oven-test-aged) balls had a higher rebound than new ones of the same brand; this was due probably to wear of the cover.

The two balls of English make showed relatively great amounts of cover wear. Among the American balls, the greatest amount of wear of cover was about twice as great as the least; the *Victor* was the best ball tested in this respect.

All the balls had white covers except the *Slazengers* which were red.

U.S.L.T.A. Requirements for Tennis Balls

	More than	Less than
Diameter	2½ in.	2⅝ in.
Weight	2 oz.	2-1/16 oz.
Rebound[1]	53 in.	58 in.
Deformation[2]	.265 in.	.290 in.

[1]When dropped 100 in. on a concrete base.
[2]Subjected to 18 lb. applied to each end of any diameter.

A. Recommended

Victor (A. G. Spalding & Bros., 161 Fifth Ave., N.Y.C.; Montgomery Ward's Cat. No. 60—4500) 3 for $1.69, plus postage; retail, 3 for $1.79. More than average loss of rebound after aging. Cover adhesion, satisfactory. Cover wear, less than average — best ball tested in this respect. **1**

Dunlop (Dunlop Tire & Rubber Corp., The Marsh, Buffalo) 3 for $2.10. About average loss of rebound after aging. Cover adhesion, very good. Cover wear, less than average. **2**

MacGregor (MacGregor Golf, Inc., 4861 Spring Grove Ave., Cincinnati 32) 3 for $2.10. Little loss of rebound after aging. Cover adhesion, satisfactory. Cover wear, somewhat high. **2**

Spalding (A. G. Spalding & Bros.) 3 for $2.10. More than average loss of rebound after aging. Adhesion, satisfactory. Cover wear, less than average. **2**

Wilson (Distributed by Wilson Sporting Goods Co.) 3 for $2.10. Appeared to be the same ball as *MacGregor*. Cover wore less than average amount. **2**

Wright and Ditson (Made by A. G. Spalding & Bros.) 3 for $2.10. Little loss of rebound after aging. Cover adhesion, satisfactory. Cover wear, less than average. **2**

Pennsylvania (Pennsylvania Rubber Co., Jeanette, Pa.) 3 for $2.25. More than average loss of rebound after

aging. Adhesion, satisfactory. Cover wear, about average. 3

Pennsylvania "X-76" (Pennsylvania Rubber Co.) 3 for $2.25. About average loss of rebound after aging. Adhesion, satisfactory. Cover wear, less than average. 3

B. Intermediate

J. C. Higgins (Made by A. G. Spalding & Bros.; Sears-Roebuck's Cat. No. 6—1231) 3 for $1.69, plus postage. Rebound, too high as received; more than average loss of rebound after aging. Adhesion, satisfactory. Cover wear, less than average. 1

C. Not Recommended

Olympic (Made in England) 49c each; 3 for $1.47. Rebound, too low as received and after aging (poorest ball tested in this respect). Adhesion, very good. Cover wear, excessive. 1

Slazenger "Red" (Made in England) 3 for $2.25. About average loss of rebound after aging. Adhesion, very good. Cover wear, excessive. 3

Midget Fan — Not So Cooling

A NEWSPAPER ADVERTISEMENT about a year ago described a "New Midget Fan to Keep You Cool on a Hot Day Costs $1.98." This was the *Tom Thumb Pocket Fan* (Rodorn Distributing Co., 35 W. 53 St., New York City), with a tiny fan about 2¼ inches in diameter, operated by two small "penlight" size dry cells (½ inch x 2 inch). The fan complete with the cells weighs 3 ounces.

Since the indications were that a device of this type might be of interest to many consumers, CR obtained a sample fan for test. The results were pretty unfavorable. With fresh dry cells, the slight breeze that was set up would show a noticeable cooling effect when the fan was held about 5 inches from the face. At a distance much beyond 5 inches, the breeze was barely noticeable; and it could no longer be felt at about 1½ feet.

A running test with the fan on and off every 15 minutes, gave about 78 minutes running time, with the fan producing a useful amount of air motion for about 30 minutes of that time.

The cost of the batteries for operating the fan during those 30 minutes would come to about 20 cents. A 10-inch household electric fan connected to a light socket could be run for 30 minutes for 8 hundredths of a cent at average rates for electricity. Considering the extremely high cost of operation and the very small air movement produced, the midget fan is in CR's opinion to be regarded as a novelty and of little practical use other than as a toy that might be interesting for a young child.

Labels of Packaged Foods Call for Close Reading

A SUBSCRIBER not long ago sent in to Consumers' Research a label from a cinnamon roll, the content of which is given in the second column of this article, except that the brand name and the name of the manufacturer are omitted (since the practice illustrated is almost universal among makers of the packaged baked goods sold in grocery stores).

The subscriber is well aware of the disadvantages in consuming food substances of unknown or incompletely-known characteristics; he comments:

> Since the appearance in your magazine of several articles dealing with the odd things which are going into prepared foods these days, I have become "label conscious." Enclosed is the label from a package of baked goods purchased at the corner store yesterday. On reading it, it appears more like a table of contents in a chemistry book than a list of contents for cinnamon rolls. Even though they tasted pretty good, I don't think that I will be buying this particular brand again.

The list of ingredients of the cinnamon rolls reads:

> Ing.: Flour, sugar, shortening, dried skim milk, fruit, dried whole egg, lecithin, yeast, salt, yeast food, leavening, water, artificial flavor and colors, gelatin, pectin, and citrates, glycerides, glycerol esters added as softener, phosphotides and calcium propionate added as mold inhibitors.

Consumers' Research hopes that many consumers will follow the practice of our correspondent and learn to read ingredients labels on bakery products and ready-mixed cake and pie fillings, brown-and-serve rolls, etc. If many more people were to get into the habit of reading such labels, and take the position that substances they don't know about are probably best not consumed, the market for foods of this sort would be greatly reduced. It would perhaps be limited to those who are satisfied if something "tastes good" and who do not care whether it is a strictly wholesome food made of materials of known safety and harmlessness — such as a housewife who is a good cook would use.

RATINGS of MOTION PICTURES

THIS section aims to give critical consumers a digest of opinion from a wide range of motion picture reviews, including the motion picture trade press, leading newspapers and magazines—some 19 different periodicals in all. The motion picture ratings which follow thus do not represent the judgment of a single person, but are based on an analysis of critics' reviews.

The sources of the reviews are:

Box Office, Chicago Daily Tribune, Cue, Daily News (N.Y.), *The Exhibitor, Harrison's Reports, Motion Picture Herald, National Legion of Decency List, Newsweek, New York Herald Tribune, New York Times, Parents' Magazine, Release of the D.A.R. Preview Committee, Reviews and Ratings* by the Protestant Motion Picture Council, *Successful Farming, Time, Times Herald* (Washington, D.C.), *Variety* (weekly), *Weekly Guide to Selected Motion Pictures* (National Board of Review of Motion Pictures, Inc.).

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), or C (not recommended) on its entertainment values.

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

adv—adventure
biog—biography
c—in color (Technicolor, Cinecolor, Trucolor, Magnacolor, Vitacolor, etc.)
car—cartoon
com—comedy
cri—crime and capture of criminals
doc—documentary
dr—drama
fan—fantasy
hist—founded on historical incident
mel—melodrama
mus—musical
mys—mystery
nov—dramatization of a novel
rom—romance
sci—science fiction
soc—social-problem drama
trav—travelogue
war—dealing with the lives of people in wartime
wes—western

A	B	C		
—	9	3	**Abbott and Costello Meet the Invisible Man**	*com A*
2	3	1	**Ace in the Hole**	*mel A*
—	6	7	**Air Cadet**	*war-dr A*
—	3	9	**Al Jennings of Oklahoma**	*wes-c A*
—	4	8	**Along the Great Divide**	*wes AYC*
—	4	1	**Angelo**	*war-dr A*
—	2	4	**Another Shore**	*com A*
—	9	4	**Apache Drums**	*wes-c AYC*
—	—	5	**Appointment with Crime**	*cri-mel A*
—	13	1	**Appointment with Danger**	*cri-mel A*
—	2	4	**As Young as You Feel**	*com A*
—	8	7	**Bedtime for Bonzo**	*com AYC*
—	4	7	**Belle Le Grand**	*mel A*
—	4	2	**Best of the Badmen**	*wes-c AYC*
—	7	9	**Bird of Paradise**	*dr-c A*
—	7	2	**Blue Blood**	*mel-c AYC*
—	5	4	**Bowery Battalion**	*war-mel A*
2	9	4	**Brave Bulls, The**	*dr A*
—	3	—	**Browning Version, The**	*dr A*
—	2	5	**Buckaroo Sheriff of Texas**	*wes YC*
3	12	1	**Bullfighter and the Lady**	*dr A*
—	—	4	**Buried Alive**	*mel A*
—	8	—	**California Passage**	*mel AYC*
—	11	6	**Call Me Mister**	*mus-com-c A*
—	3	2	**Call of the Klondike**	*dr AYC*
—	4	—	**Captain Horatio Hornblower**	*war-mel-c AYC*
—	10	6	**Cause for Alarm**	*cri-dr A*
—	5	3	**Cavalry Scout**	*wes-c A*
1	7	4	**Chance of a Lifetime**	*dr A*
—	3	2	**China Corsair**	*cri-mel A*
—	1	4	**Christina**	*dr A*
—	4	5	**Circle of Danger**	*mys-mel AYC*
—	4	2	**Comin' Round the Mountain**	*com A*
—	5	9	**Company She Keeps, The**	*dr A*
—	—	3	**Crossroads of Passion**	*war-mel A*
—	10	3	**Cry Danger**	*cri-mel A*
—	2	4	**Cuban Fireball**	*mus-mel A*
—	2	2	**Dance of Life**	*doc A*
—	—	4	**Danger Zone**	*mys-mel A*
—	4	5	**Dear Brat**	*com A*
—	1	5	**Doctor, Beware!**	*com A*
—	—	8	**Double Deal**	*cri-mel A*
—	3	—	**Dream Ballerina**	*dr AYC*
1	8	2	**Emperor's Nightingale, The**	*fan-c AYC*
—	10	7	**Enforcer, The**	*cri-mel A*
—	4	1	**Excuse My Dust**	*mus-com-c AYC*
—	4	6	**Fabiola**	*hist-mel A*
—	6	2	**Face to the Wind**	*dr A*
—	4	8	**Fat Man, The**	*cri-mel A*
2	13	3	**Father's Little Dividend**	*com A*
—	3	5	**Fighting Coast Guard, The**	*war-mel AYC*
—	1	5	**Fingerprints Don't Lie**	*cri-mel A*
1	10	1	**First Legion, The**	*dr A*
—	5	10	**Five**	*dr A*
—	1	7	**Flame of Stamboul**	*mys-mel-c A*
—	9	6	**Flying Missile, The**	*war-dr AYC*
—	13	4	**Follow the Sun**	*biog-dr A*
—	4	4	**Footlight Varieties**	*mus-com A*
—	2	4	**Fort Savage Raiders**	*mus-wes A*
—	4	1	**Fort Worth**	*wes-c A*
—	6	4	**Four in a Jeep**	*war-mel A*
2	13	1	**Fourteen Hours**	*doc-mel A*
2	7	—	**Francis Goes to the Races**	*com AYC*
—	5	—	**Frogmen, The**	*war-mel AYC*
—	2	6	**Fury of the Congo**	*mel AYC*
—	4	9	**Gambling House**	*mel A*
—	7	1	**Gasoline Alley**	*com AYC*
—	3	1	**Gay Lady, The**	*mus-com-c A*
—	5	3	**Gene Autry and the Mounties**	*mel-c AY*
—	1	4	**Ghost Chasers**	*mel AYC*
3	12	1	**Go for Broke**	*war-dr AYC*
6	4	1	**God Needs Men**	*dr A*
—	7	8	**Goodbye My Fancy**	*dr A*
4	10	2	**Great Caruso, The**	*mus-biog-c AY*
—	5	10	**Groom Wore Spurs, The**	*com A*
—	7	9	**Grounds for Marriage**	*mus-com A*
—	2	5	**Gunplay**	*wes AYC*
—	3	5	**Guy Who Came Back, The**	*dr A*
—	2	3	**Gypsy Fury**	*dr A*
—	5	8	**Half Angel**	*com-c A*
—	5	1	**Hard, Fast and Beautiful**	*dr A*
1	3	6	**He Ran All the Way**	*mel A*
—	6	2	**Heart of the Rockies**	*mus-wes AYC*
—	2	4	**Her First Romance**	*com AY*
—	—	4	**Here Come the Huggetts**	*com A*
—	5	—	**Hills of Ireland**	*doc-c AYC*
—	10	5	**Hollywood Story, The**	*cri-mel A*
—	2	4	**Home Town Story**	*dr AYC*
—	1	2	**Hoodlum, The**	*cri-mel A*
—	7	9	**House on Telegraph Hill**	*mys-mel A*
—	5	1	**Hue and Cry**	*cri-com A*
—	6	3	**Hunt the Man Down**	*cri-mel A*
—	11	2	**I Can Get It for You Wholesale**	*dr A*
1	11	4	**I Was a Communist for the FBI**	*mel AYC*
—	4	4	**I Was an American Spy**	*mys-mel A*
—	15	3	**I'd Climb the Highest Mountain**	*dr-c A*
—	3	1	**In Old Amarillo**	*mus-wes AYC*
—	1	5	**Inheritance, The**	*cri-mel A*
—	2	14	**Inside Straight**	*mel A*
—	6	8	**Inside the Walls of Folsom Prison**	*mel A*
—	2	4	**Insurance Investigator**	*cri-mel A*
—	3	3	**Interrupted Journey, The**	*mel A*
—	—	—	**Isle of Sinners (see God Needs Men)**	
—	1	4	**It's Hard to be Good**	*com A*

A	B	C		
2	2	—	**Jim Thorpe — All American**	*biog A*
—	1	3	**Joseph Schmidt Story, The**	*mus-dr A*
—	6	4	**Jungle Headhunters**	*trav-c A*
—	3	4	**Katy Did It**	*com A*
—	1	3	**King of the Bullwhip**	*wes AYC*
5	9	1	**Kon-Tiki**	*doc AYC*
—	1	5	**Korea Patrol**	*war-mel A*
—	2	3	**Krakatit**	*sci A*
—	3	3	**Lady Paname**	*com A*
—	1	4	**Last Illusion, The**	*war-dr A*
—	5	4	**Last Outpost, The**	*mel-c A*
—	6	—	**Law of the Badlands**	*wes AYC*
1	7	10	**Lemon Drop Kid, The**	*mus-mel A*
—	1	4	**Lightning Guns**	*mus-wes AYC*
—	10	6	**Lightning Strikes Twice**	*mys-mel A*
—	1	2	**Lion Hunters, The**	*adv AY*
—	1	5	**Little Ballerina**	*dr AYC*
—	4	1	**Little Big Horn**	*wes A*
—	12	3	**Long Dark Hall, The**	*cri-mel A*
—	8	2	**Lorna Doone**	*nov A*
—	1	5	**Lovers of Verona, The**	*dr A*
—	7	6	**Lucky Nick Cain**	*mel A*
—	9	8	**Lullaby of Broadway**	*mus-com-c A*
—	7	8	**"M"**	*cri-mel A*
—	5	7	**Ma and Pa Kettle Back on the Farm**	*com AYC*
2	11	2	**Magnet, The**	*dr AYC*
—	3	5	**Man from Planet X, The**	*sci AYC*
—	9	8	**Man Who Cheated Himself, The**	*mel A*
—	6	7	**Man with My Face, The**	*cri-mel A*
—	2	5	**Manon**	*dr A*
—	—	3	**Mask of the Dragon**	*mys-mel A*
1	12	4	**Mating Season, The**	*com A*
—	2	1	**Mill on the Po**	*dr A*
—	1	4	**Million Dollar Pursuit**	*cri-mel A*
—	3	2	**Minnie**	*dr A*
—	2	4	**Miquette**	*com A*
—	1	5	**Missing Women**	*cri-mel A*
—	1	5	**Mr. Imperium**	*mus-dr-c A*
—	9	4	**Mr. Universe**	*com AYC*
—	—	5	**My Brother, the Outlaw**	*wes A*
—	2	1	**My First Love**	*dr A*
—	3	13	**My Forbidden Past**	*dr A*
—	3	4	**My True Story**	*cri-mel A*
—	1	2	**Naughty Arlette**	*com A*
—	—	5	**Native Son**	*dr A*
—	5	2	**Navy Bound**	*war-dr AYC*
1	4	4	**New Mexico**	*wes-c A*
—	4	5	**Night Into Morning**	*dr A*
—	2	3	**Night Riders of Montana**	*wes AYC*
—	—	9	**No Orchids for Miss Blandish**	*cri-mel A*
—	2	1	**No Place for Jennifer**	*dr A*
—	5	—	**No Questions Asked**	*mys-mel A*
1	8	3	**Odette**	*war-mel A*
—	2	2	**Oh, Amelia**	*com A*
—	4	7	**Oh! Susanna**	*wes-mel-c A*
2	3	—	**Oliver Twist**	*nov A*
2	10	3	**On the Riviera**	*mus-com-c A*
—	3	1	**One Minute to Twelve**	*dr A*
—	7	5	**Only the Valiant**	*hist-wes A*
1	11	—	**Operation Disaster**	*war-dr AYC*
—	10	5	**Operation Pacific**	*war-dr A*
—	8	7	**Pagan Love Song**	*mus-dr-c A*
—	8	1	**Painted Hills, The**	*mel-c AYC*
—	—	4	**Pandora and the Flying Dutchman**	*fan-c A*
—	4	1	**Passage West**	*wes-c A*
3	6	7	**Payment on Demand**	*dr A*
—	—	5	**Perfect Woman, The**	*com A*
—	2	3	**Pier 23**	*cri-mel A*
—	3	2	**Prairie Roundup**	*mus-wes AYC*
—	3	10	**Prehistoric Women**	*dr-c A*
—	2	6	**Pride of Maryland**	*mel AYC*
—	2	3	**Prince of Peace, The**	*dr-c AYC*
—	8	1	**Prince Who Was a Thief, The**	*adv-c A*
—	3	8	**Prowler, The**	*cri-mel A*
—	3	13	**Quebec**	*war-mel-c A*
—	6	2	**Queen for a Day**	*dr A*
—	4	10	**Raton Pass**	*wes A*
—	1	2	**Rats of Tobruk, The**	*war-dr A*
—	11	7	**Rawhide**	*wes A*
—	—	3	**Red Angel, The**	*cri-mel A*
—	5	9	**Redhead and the Cowboy, The**	*wes A*
—	4	4	**Revenue Agent**	*mel A*
—	5	2	**Rhythm Inn**	*mus-com A*
—	5	2	**Ridin' the Outlaw Trail**	*mus-wes AYC*
—	1	2	**Rivals, The**	*doc AYC*
—	3	10	**Rogue River**	*mel-c A*
—	3	4	**Rough Riders of Durango**	*wes AYC*
4	10	1	**Royal Wedding**	*mus-com-c A*
—	2	2	**Saddle Legion**	*wes AYC*
—	8	3	**Santa Fe**	*wes-c AYC*
—	10	5	**Sealed Cargo**	*war-mel AYC*
—	4	7	**Second Woman, The**	*mys-mel A*
—	—	5	**Secret Brigade**	*war-dr A*
1	2	5	**Secret of Mayerling, The**	*dr A*
—	3	1	**Seven Journeys**	*war-dr A*
3	2	—	**Show Boat**	*mus-dr-c A*
—	7	3	**Sierra Passage**	*wes A*
—	4	4	**Silver City Bonanza**	*mus-wes AYC*
—	4	5	**Sirocco**	*war-mel A*
—	2	1	**Skipalong Rosenbloom**	*com AYC*
—	2	6	**Smuggler's Gold**	*cri-mel AYC*
—	3	12	**Smuggler's Island**	*mel-c A*
—	3	2	**Snake River Desperadoes**	*wes AYC*
—	9	7	**Soldiers Three**	*war-com A*
—	3	1	**Song of My Heart**	*mus-dr A*
—	4	9	**Sound of Fury, The**	*cri-dr A*
—	3	9	**Spoilers of the Plains**	*mus-wes AY*
—	2	4	**Stage to Tucson**	*wes-c AYC*
2	7	4	**Steel Helmet, The**	*war-mel A*
—	—	3	**Stolen Affections**	*dr A*
2	3	2	**Strangers on a Train**	*cri-mel A*
2	—	2	**Streetcar Named Desire, A**	*dr A*
—	3	11	**Sugar Foot**	*wes-c A*
—	5	6	**Sword of Monte Cristo, The**	*mel-c AYC*
—	3	6	**Take Care of My Little Girl**	*dr-c A*
4	8	4	**Tales of Hoffman**	*mus-dr-c A*
—	11	6	**Target Unknown**	*war-mel AYC*
—	5	3	**Tarzan's Peril**	*mel AYC*
2	8	4	**Teresa**	*dr A*
—	1	5	**Texans Never Cry**	*mus-wes-c AYC*
—	5	—	**Texas Rangers, The**	*wes-c AYC*
—	4	1	**That's My Boy**	*com A*
—	—	4	**They Were Not Divided**	*war-dr A*
—	10	3	**Thing from Another World, The**	*sci A*
1	12	3	**Thirteenth Letter, The**	*mys A*
—	—	5	**Three Desperate Men**	*wes A*
—	13	3	**Three Guys Named Mike**	*com A*
—	1	2	**Three Steps North**	*mel A*
—	4	2	**Thunder in God's Country**	*mus-wes AYC*
—	4	10	**Tokyo File 212**	*war-mel A*
—	5	6	**Tomahawk**	*wes-c A*
—	8	—	**Tony Draws a Horse**	*com A*
—	7	2	**Trail of Robin Hood**	*mus-wes-c AYC*
—	1	3	**Treasure, The**	*com A*
—	—	—	**Try and Get Me (see Sound of Fury, The)**	
—	1	6	**Two Lost Worlds**	*adv AYC*
—	—	3	**Under Sunny Skies**	*propaganda-mus-com A*
—	4	11	**Under the Gun**	*cri-mel A*
1	9	5	**Up Front**	*war-com AYC*
2	13	—	**U.S.S. Teakettle**	*war-com A*
1	8	7	**Valentino**	*dr-c A*
—	9	6	**Vengeance Valley**	*wes-c A*
—	1	5	**Victors and the Vanquished, The**	*war-dr A*
—	—	3	**Vienna Blood**	*mus-com A*
—	7	—	**Warpath**	*mel-c A*
—	9	4	**Ways of Love**	*dr A*
—	—	4	**Wells Fargo Gunmaster**	*wes AYC*
—	5	1	**When I Grow Up**	*dr AYC*
—	2	4	**When the Redskins Rode**	*wes-c A*
—	1	11	**Where Danger Lives**	*mys-mel A*
—	4	1	**Whirlwind**	*mus-wes-c AYC*
—	3	2	**Wonderful Times**	*doc A*
—	3	7	**Yank in Korea, A**	*war-dr AYC*
—	—	—	**You're in the Navy Now (see U.S.S. Teakettle)**	

The Consumers' Observation Post

(Continued from page 4)

SHOULDER PADS in some women's suit coats, particularly when the fabrics contain acetate rayon, are causing the dry cleaners no end of trouble. The Bulletin Service of the National Institute of Cleaning and Dyeing reports that when such a garment is cleaned it may develop a color change like that in fume fading; blues change to purple or red; greens turn to a tan or brown. On wool fabrics the commonest change is from brown to green. The Institute's researchers also report that linings become rotted and weak and sometimes change color also. Once the color change has taken place, nothing will change it back. Tests made on the shoulder pads of the damaged garments by the Institute's chemists indicated that they were a type known as bonded-wool and contained a synthetic rubber known as Neoprene. No satisfactory cleaning method has yet been discovered for dry cleaning garments that have shoulder pads containing this substance.

* * *

METAL LADDERS, particularly those made from aluminum and magnesium alloys, have achieved some popularity in recent years. The advantage in their use is that they are light and easy to handle. The National Safety Council, however, warns that all-metal ladders are electrical conductors, and they should not be used around any place where they may come in contact with an electrical circuit. It is well to bear in mind that, while one or two users of a metal ladder may be aware of this disadvantage, someone else is likely to come along who will not think of it and will make use of the ladder in a way that might bring about death by electric shock. The treads, in general, of metal ladders appear to be slippery, and sometimes the side rails have edges sharp enough to cut the hands when one takes hold of them.

* * *

THE HOME GARDENER will find helpful information on some of his problems in Handbook on Insect Enemies of Flowers and Shrubs, Miscellaneous Publication No. 626, U. S. Department of Agriculture. The 112-page manual is divided into several general sections, of which the two largest are General Plant Pests

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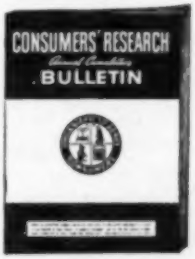

and Insects Attacking Specific Plants. There is also a section on insecticides with a useful table showing the quantities of common insecticides to be used in preparing sprays in 1, 3, and 50 gallon quantities. The publication is available at 45 cents from the Superintendent of Documents, Government Printing Office, Washington, D. C.

* * *

WHEN BUYING NEW COTTON FABRICS, be sure to look for washing instructions on a tag attached to the garment or ask the store buyer to have such instructions written on the sales check. Some of the new white embossed glazed cottons, reports the U. S. Department of Agriculture, turn yellow if they are rinsed in water to which bleach has been added. Manufacturers' instructions should be attached to such garments and the consumer should follow them, in order to prevent an unhappy result from the first laundering.

* * *

BUTTER FLAVOR can now be secured in bakery products by a newly patented product involving the use of a non-volatile salt of butyric acid and butyric acid esters, reports a food journal. Still another butter flavor for commercial products is described as derived from processed butterfat and "a concentrated distillate derived from a bacterial culture." Use of such items may make for lower production cost and longer shelf-life for store bakery products, but surely will not increase the low esteem in which women have indicated they hold "grocery store cakes."

* * *

RECENTLY TESTED:

Chipless Can Opener (Home Devices Corp., New York 19), available by mail from the company at $3. Advertising claims on the box and accompanying circular urged: "For Your Health's Sake Use the Chipless Can Opener. . . .Beware! Metal Particles in Your Food Can Harm Your Health! Don't Gamble with Your Family's Health. . . .Use the Revolutionary New Chipless Can Opener to Make Certain the Canned Food You Serve is Free of Metal Particles and Dirt . . . ." As CR subscribers know, we have for many years tested and reported unfavorably on can openers that, in opening a tin can, cut off and allow slivers of the metal to drop into the food. The promoter of this particular make certainly had the right approach to an effective sales appeal. Unfortunately, this can opener as received did not live up to the representations made for it, for the first cutting disk dropped at least one sliver and some pieces of metal into the can that was being opened. (A second disk gave good performance in this respect.) The opener was found to be uncomfortable to use, and CR considers that it is sold at an unduly high price in view of the simple and inexpensive mechanism provided. At the $3 price the consumer has a right to expect a wall-mounted opener, or at least one with a comfortable handle.

Consumers' Research, Inc.
Washington, N. J.

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PHONOGRAPH RECORDS

BY WALTER A. GRUENINGER

Please Note: In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended. Although nearly all new releases of serious music are heard, space narrows comment, generally, to items which merit high ratings.

Beethoven: *Piano Concerto No. 5* ("Emperor"). Serkin with the Philadelphia Orchestra under Ormandy. Columbia LP 54373. $5.45. Conceived on the grand, heroic scale; among Beethoven's greatest works. Serkin is more fussy than Schnabel whose majestic performance for Victor is breath taking. Yet, Serkin stands the test. In both cases the orchestral support is meritorious. Serkin's recording, though less brilliant than Curzon's on London LP 114, has body, clarity and warmth. The 3 remaining LP recordings of this work don't belong in this company.
Interpretation AA
Fidelity of Recording AA

Dufay: *Secular Works.* Pro Musica Antiqua under Cape. EMS Recordings LP 206. $5.95. An assortment of vocal and instrumental works by a polyphonic composer of prominence who died in 1474. Performed by a Belgium ensemble of 5 singers and 6 instrumentalists whose work strikes me as authentic, charming, and praiseworthy. Excellent recording. One of 42 LP records of 12th to 17th century music announced by EMS.
Interpretation AA
Fidelity of Recording AA

Handel: *Six Concerti for Orchestra* (Op. 3) & *Alexanderfest Concerto in C Major.* Vienna State Opera Orchestra under Prohaska. 4 sides, Bach Guild LP's 505/6. $11.90. The *Concerti for Orchestra* precede the celebrated *Concerto Grossi* (Op. 6) but also offer music of a high order. There are obvious merits to the performance and direction though less propriety would have enlivened matters. Recording sounds best with highs attenuated.
Interpretation A
Fidelity of Recording A

Schumann: *Etudes Symphoniques* & **Beethoven:** *Sonata No. 31.* Casadesus (piano). Columbia LP 54388. $4.85. Beautiful works. Musicianly, refined playing but with less drama than you are likely to hear from some other performers. Good, though not exceptional, recording.
Interpretation A
Fidelity of Recording A

Schumann: *Symphony No. 2.* Munich Philharmonic Orchestra under Papst. Mercury LP 10082. $4.85. This romantic symphony certainly possesses vitality and lush melodies, though it lacks organization. The orchestra plays very well indeed. Bright recording that requires some attenuation of high frequencies. Best of a new batch of Mercury LP's, with Beethoven's *Piano Concerto No. 1* close behind.
Interpretation AA
Fidelity of Recording AA

Sibelius: *Symphony No. 1.* Stokowski and His Symphony Orchestra. RCA Victor LP 1125. $5.45. Sibelius' *First* includes so many Tchaikovsky derivatives it is sometimes called Tchaikovsky's *Seventh*. Stokowski plays it with appropriate drama and lyricism and less schmaltz than I have heard. The recording is clear and it possesses depth in orchestral placement but lacks a real bass.
Interpretation AA
Fidelity of Recording A

Smetana: *The Moldau* and *From Bohemia's Fields and Groves.* Philharmonic-Symphony Orchestra of New York under Szell. Columbia LP 2177. $4. *The Moldau*, long a favorite with symphonic audiences, traces the course of the river from its mountain streams to the Elbe. Overside, I find dull. Sympathetic treatment by the performers and acceptable recording.
Interpretation AA
Fidelity of Recording A

Verdi: *Don Carlo* — Scenes from Act III. Pernerstorfer, Konetzni, Hoengen, Oeggl, A. Welitsch under Baltzer. Capitol-Telefunken LP 8144. $4.85. Most of Act III which includes some of the most moving pages of the opera. Sung in German by principals of the Vienna Opera. Pernerstorfer as the King is best. Welitsch as the Grand Inquisitor has trouble reaching his lowest notes. But in most other respects the music is performed with perception and taste. Depth in the recording, yet the singers are not always at equal distances from the microphone and a metallic quality creeps in occasionally.
Interpretation A
Fidelity of Recording A

Verdi: *Nabucco.* Silveri, Gatti, Binci, Cassinelli, etc., under Previtali. 6 sides, Cetra-Soria Set 1216. $17.85. The opera is Verdi's third, the keystone of his success. Though seldom performed, it offers many rousing Verdian tunes. The cast is uneven with Cassinelli as the High Priest, disappointing; Silveri as the King, acceptable; and Mancini as Abigaille, impressively dramatic though not always on pitch. Excellent direction. Recording of the orchestra is thin but voices are well recorded.
Interpretation A
Fidelity of Recording A

Wagner: *Tristan und Isolde.* Bäumer, Suthaus, Frick, etc., under Konwitschny. 10 sides, Urania LP Set 202. $30.25. One of the most frequently performed German operas now becomes the longest single work ever recorded. It's uncut. Too bad the female voices do not equal the male. Wobbly-voiced Bäumer is no substitute for Flagstad. Impulse and spirit of the direction is commendable. But one act was recorded each day without a break in the performance to prevent "loss of over-all sweep and unity." The result is similar to the recording of an actual performance which means there are flaws. Fidelity is uneven though quite good. Seemingly, the microphone moves around, first in the orchestra and then amid the singers. In general, I would like more orchestral detail. Volume range is sometimes reduced, too, such as at the end of the climactic second act. Fidelity range is satisfactory. Overall, a gigantic effort which whets the appetite for the *perfect* recording.
Interpretation B
Fidelity of Recording A

Walton: *Concerto for Violin* & **Vieuxtemps:** *Concerto No. 5.* Heifetz (violin) with the Philharmonia Orchestra under Walton and the London Symphony under Sargent. RCA Victor LP 1121. $5.45. The Walton has been newly recorded but the Vieuxtemps appears to be an LP release of the performance previously issued on 78's. The Walton, written for Heifetz, is played suavely and perhaps superficially. But there is not any doubt about the excellence of the Vieuxtemps performance though the recording is inferior to the Walton, particularly the orchestra. Yet there is good value here for violin fans.
Interpretation AA
Fidelity of Recording A

OTHER LP'S HIGHLY RECOMMENDED
(for interpretation and for fidelity)

ALLEGRO — **Mozart:** *Violin Sonatas K 570, 304, 305.* Shumsky and Mittman on 112.

CAPITOL — *Voice of the Xtabay.* Yma Sumac (singer) on 244.

COLUMBIA — *Rose Marie* sung by Dorothy Kirsten and Nelson Eddy on 2178.

LONDON — **Schubert:** *Sonata in B Flat* (Op. Posth.). Wilhelm Kempff (piano) on 307.

RCA VICTOR — *Neapolitan Folk Songs.* Tenor Tagliavini on 72.

Bach: *Well-Tempered Clavier* — Book 1: Preludes and Fugues Nos. 17-24. Landowska (harpsichord) on 1136.

WESTMINSTER — **Bach:** *Das Musicalische Opfer.* Nine Soloists under Scherchen on 5070.

Boyce: Eight Little Symphonies. London Baroque Ensemble under Haas on 5073.

RECOMMENDED RCA VICTOR 45'S

Four Sicilian Folk Songs sung by Tenor di Stefano on 49-3268/9; Boston Pops Orchestra plays Reznicek's *Donna Diana Overture* and Weber's *Abu Hassan Overture* on 49-3266; Bosc's *Rose Mousse* and Gillet's *Loin Du Bal* on 49-3270; Rodriguez' *La Cumparsita* and Albéniz' *Triana* on 49-3275.